THE UNIVERSITY OF HONG KONG

MONITORING DEVELOPMENT CONTROL IN HONG KONG: A PROBIT ANALYSIS OF PLANNING APPLICATION FOR CHANGE IN USE AND DEVELOPMENT IN INDUSTRIAL ZONES

A DISSERTATION SUBMITTED TO
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BY

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Declaration

I declare that this dissertation represents my own work, except where due acknowledgement is made, and that is has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

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(Professor Lawrence Wai-Chung Lai)

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ABSTRACT

In this dissertation, a data set consisting of a total of 1991 collected from the Planning Department was used to evaluate the criteria for obtaining planning permissions from the Town Planning Board (the Board). The data are those for Industrial Zones located in Hong Kong Island, Kowloon, New Towns, Development Permission Areas and rural areas in the period 1975 to June 2005.

Six refutable hypotheses are set up to test the possible decision criteria of the Board. The criteria are related to the scale of development projects, location, use applied for, stage of application, the policy concerning the economic condition and the market situation in Hong Kong. The test results of each hypothesis and the theoretical implication are summarized in Table 1. Table 2 gives the probit results. A case study is also conducted to provide further information on the criteria of the Board.

Table (A): Summary Results for the Six Hypotheses

Hypotheses testing the criteria for planning approvals	Test Result	Theoretical/Policy Implications
(1) There is no difference in the probability of obtaining planning permission in larger site than smaller site.	Hypothesis is refuted	There is no evidence to prove the existence of rent-seeking activity.
(2) There is no difference in the probability of obtaining planning permission in different location	Hypothesis is not refuted	The Board does not have preference towards a particular location.
(3) There is no difference in the probability of obtaining planning permission for different uses applied for.	Hypothesis is refuted	The Board shows some preference to certain uses while dislike some other uses.
(4) There is no difference in the probability of obtaining planning permission in different stages of planning application.	Hypothesis is refuted	The Board prefers to grant planning permission if the application is a S.16 planning application.
(5) There is no difference in the probability of obtaining planning permission before and after 2001	Hypothesis is not refuted.	The Board does not act in accordance with its published guidelines.
(6) There is no difference in the probability of obtaining planning permission in different market situation.	Hypothesis is refuted.	The Board would consider the current market situation when determining the grant of planning approval.

Table (B): Probit Results of the Dependent Variables

Variable	N	D_COM	D_OFF	D_RES	D_IO	D_OFFENSIVE	D_LPS	D_HWSHOP	D_REST	HK	NT	LN(GFA)	AF01	S16	VACANCY	C	Log-likelihood
Coefficient	**1818**	**-0.1017**	**0.2655***	**0.8765***	**0.6264***	**7.3887**	**0.6306****	**7.1768**	**-0.4032***	**0.2026**	**0.1250**	**-0.0755***	**0.1271**	**0.8246***	**0.0614***	**-0.2349**	**-878.9217**
z-statistics		**-1.2591**	**2.9468**	**3.0647**	**4.4502**	**0.0000**	**2.6409**	**0.0000**	**-2.8490**	**1.8874**	**1.5682**	**-4.5939**	**0.6739**	**7.5977**	**4.1828**	**-1.2429**	

* indicates statistically significant at 5% level

** indicates statistically significant at 10% level

CHAPTER 1

INTRODUCTION

The Land Tenure System in Hong Kong

In Hong Kong, the development control regime is a dual system which comprises of lease control and statutory control. It was introduced to Hong Kong by the British colonists in 1841. Since then, all lands in Hong Kong, except the land for St John's Cathedral, belongs to the government (All the lands belonged to "the Crown" before 1997). Under the leasehold system, the government (the Crown before 1997) as the landlord, leases the land to lessees. The terms of lease vary. It can be 999 years, 99 years, 75 years, 50 years and so on. There may be a renewal option for some leases.

In the Crown/Government lease of the Conditions of Sales/Exchange/Grant (collectively known as Conditions of Sales), there are 'user clauses' which define the uses and/ or type of buildings that are permitted and/ or not permitted. These clauses define the obligations of lessees before legal title is transferred to them from the government. They actually specify the property rights that the lessees possess. Therefore Lai (1997a) argued that the leasehold system is not simply a system for allocating land by the government but is essentially 'a planning control

institution based of on a civil contract between the government on the one hand and private individuals on the other hand.' (Lai 1997a, p.19)

Town Planning Ordinance

Lai (1997a) pointed out that many planning practitioners and academics follow the view of A.C. Pigou and take the view of market failure that the free market cannot solve the problems of 'externalities[1]' and providing 'public goods[2]'. To them, the market should be regulated. (Lai 1997a, p.12)

The Town Planning Ordinance is one of the statutory development control mechanism in Hong Kong. It was enacted in 1939 and has been amended several times to cope with the changes.

As cited in the long title, the Ordinance has the objective 'to promote the health, safety, convenience and general welfare of the community by making provision for the systematic preparation and approval of plans for the lay-out of areas of Hong Kong as well as for the types of building

[1] Uncompensated effects due to transaction costs. (Lai 1998b, p.184)

[2] Goods not transacted in the market due to high transaction costs of pricing. They are transacted by the state, which taxes its citizens for payment. (Lai 1998b, p.186)

suitable for erection therein and for the preparation and approval of plans for areas within which permission is required for development.'[3]

The Town Planning Ordinance empowers the establishment of a Town Planning Board, to compose of government officials and appointed unofficial members. The main functions are to prepare plan[4] and consider planning applications[5].

Plans prepared under the Ordinance can be imposed on land parcels with pre-existing leases. The newly imposed uses can be different from those permitted by the lease. When a lessee wants to apply for a change in land use or redevelopment, he should comply with the requirements on both the lease and the applicable OZP or DPA plan, which overrides the former. In this way, the Ordinance attenuates private property rights[6] as the rights to use land for specific purpose can be taken away by the Board. However, an existing use is not affected by the implementation of a new OZP. In other words, uses that existed before the gazettal of the new OZP can continue without a need for planning permission.

[3] Long title, *Town Planning Ordinance*
[4] Section 2, *Town Planning Ordinance*
[5] Section 3, *Town Planning Ordinance*
[6] The most developed form of exclusive property rishts. The owner of a good can freely: (a) use it; (b) derive income from it; and (c) alienate or transfer it in whole or in part to another person. [Cheung 1974: 53-71]

Planning Applications

An Outline Zoning Plan (OZP) consists of three sets of statutory documents. They are (a) a zoning map; (b) a set of Notes and (c) an Explanatory Statement, which is non-statutory in nature. The explanatory Statement assists in the understanding of the OZP and often states the planning intention and objective of the TPB for various land use zones. In the Notes of the OZP, there are column 1 and column 2 uses for each type of zones. Column 1 specifies those uses in a zone which are always permitted while column 2 specifies those uses in the zone for which planning permission is needed. In some cases, there may be additional controls on the development on certain land parcels and these may be specified under the 'Remarks' column in the Notes for that land use zone.

When applying for a change in land use, if the desired use falls under column 1 or if the use is always permitted, there is no need for the developer to apply under section 16 of the Town Planning Ordinance to the Town Planning Board for planning permission. However, if the use falls under column 2, the developer needs to apply for planning permission. This is what is referred to as 's. 16 applications'. There is no need to apply for planning permission if the use is an existing use.

For each planning applications, the Town Planning Board can approve with or without planning conditions or reject it outright. If the applicant feels aggrieved, he can apply to the TPB for a review under section 17(1) of the Town Planning Ordinance. If the application is still rejected on review, the applicant can further apply to the TPB for an appeal under section 17(B) of the Town Planning Ordinance.

If a use does not fall into any of the above categories, the applicant can only apply for rezoning in order to realize the development project. However, the chance of success has not been studied.

Uncertain Considerations in Planning Application Process

When making a planning application, the applicant should understand the material considerations and the planning intention for the relevant land use zone. However, there are few clear and express indications from the Town Planning Ordinance as regard definition of material considerations. It is argued that the provision of uses in column 1 and 2 in the Notes in the OZP has provided certainty for planning application. However, there is still no indication on the probability of success. In addition, the Town Planning Board, having considered planning applications, often rejects them by the reasoning of 'contravening planning intention'. The ambiguity of the

reasoning creates uncertainty for development. In addition, due to privacy, many details of planning applications by individuals or consultants are no longer disclosed by the Planning Department to the public. Only such limited information as plan number of OZP, location, lot number, existing Gloss Floor Area (GFA), proposed GFA, etc, are available for public inspection. They are sufficient for statistical analysis.

Background of the study

Hong Kong is undergoing a structural change in the economy. It has changed from a manufacturing-oriented economy to a service-oriented economy. Many manufacturing factories have moved to the mainland for the cheaper labour and rent there. In response to the declining demand for industrial land use, the Town Planning Board has issued new guidelines[7] to cope with the fall in demand for land in Industrial Zones.

In the year 2004, the Board issued guidelines to introduce a new class of zone, namely the 'Other Specified Uses (Business) Zone'. The introduction of this new class is 'to allow maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings as well as in the development of new buildings for both commercial and clean industrial uses.

[7] TPB PG No. 22B, 25B

It is perceived as a combination of the "Commercial" and "Industrial" zones.'[8]

The planning intention of this new class of zone is

'The zone is intended primarily for general business uses. A mix of information technology and telecommunication industries, non-polluting industrial, office and other commercial uses are always permitted in new "business" buildings. Less fire-hazard-prone office uses that do not involve direct provision of customer services or goods to general public is always permitted in existing industrial or industrial-office buildings.' (OZP S/H15/21, p.18)

While the planning intention of the industrial zone is

'This zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone.' (OZP S/H15/21 p. 13)

[8] TPB PG No. 22B

It can be shown that more business related elements have been added in the planning intention in the other specified use (business) zone. This can be seen as a measure to deal with the surplus of industrial land while solving the problem for the surge in demand for office and other related use at that time.

Objectives

The Town Planning Board's decision to grant planning permission has seen as a 'black box' process. There is no clear indication as to the criteria for granting planning permissions. Moreover, not much detail has been provided in the Town Planning Ordinance as regards the requirement for a successful planning application, although guidelines have been issued by the Board to help explain its planning intentions. In this dissertation, the possible decision criteria for considering planning applications are examined using a probit model to analyze non-aggregate planning statistics obtained from the Planning Department by Professor Lawrence Lai, Yung Ping and others. It is hope that the research can generate more clues on the decision criteria of the Town Planning Board when determining planning applications.

Structure of Dissertation

The dissertation will be divided into 8 chapters. Chapter 1 is the introduction. Chapter 2 is about the evolution of the planning system and the manufacturing industry in Hong Kong. Chapter 3 is an empirical study on the industrial activities in Hong Kong. A literature review of development control and the use of development control data is given in chapter 4. The data collected, hypothesis and the methodology used to test the hypotheses explained in Chapter 5. In Chapter 6, the results of the test and an interpretation of test results are demonstrated. A case study is conducted in Chapter 7. Chapter 8 is the conclusion.

CHAPTER 2

EVOLUTION OF GOVERNMENT INDUSTRIAL LAND POLICIES IN HONG KONG

Early Industrial Development in Hong Kong

Industry came to Hong Kong in the nineteen century. Industrial activities at the time included sugar refining and ship repair which were facilitated by the import-and-export trade. In the 1930s, industrial operations in Hong Kong included knitting and weaving, making of medicines and perfumes, printing and stationery, production of cakes and sweets, making of rubber and canvas shoes, preserves and canning. They together accounted for 40 percent of overall Chinese industrial investment[9]. The competitive climate at that time was keen. Manufacturers in Hong Kong competed with those in Canton. However, many manufacturers were attracted to Hong Kong in spite of the high costs owing to political turmoil in China.

The Industrial expansion in Hong Kong was arrested by war between China and Japan from 1937 and the Second World War from 1941. During the war, many skilled labour in Hong Kong were killed or escaped to China.

[9] D. Faure and P.T. Lee. *Economy* (Hong Kong: Hong Kong University Press, 2004).

The population was greatly reduced. Moreover, the machinery needed for industrial activities was taken away by the Japanese. The lack of materials, machinery and the high cost of labour paralyzed the Industry in Hong Kong.

Recovery in Hong Kong after the Second World War was brought by Shanghainese industrialists who brought with them their expertise. Recovery was further facilitated by capital injection brought about by runaway inflation in China in the aftermath of the war and, later, by political confusion. The new industries at the time were plastic, textile and film making. They were mostly owned by Chinese people in Hong Kong.

In the mid 1950s, the United States Government imposed embargo on shipment as a response to the Korean War. This reduced the entrêpot trade significantly. Hong Kong's solution to the quota problem was diversification, greater efficiency and higher quality. With the provision of ample labour supply, industries in Hong Kong grew rapidly. In 1960s, Hong Kong became a leading manufacturing centre in Asia.

Industrial Land Policies in 1960s[10]

In January 1960, the Town Planning Office formulated a package of urban expansion proposals in *Planning Memorandum No. 4: Ten Year Development Programme* which suggested that the future development trend should be focused on creating new satellite towns. In response, 240 large factories were established in Kwun Tong new town by the end of 1965. The Tsuen Wan/Kwai Chung New Town also provided 980 hectares of land for new development which included 395 hectares of land for industrial uses.

Towards the end of the 1960s, the Government recognized that future expansion in development should be in the New Territories. Therefore, Outline Development Plans for Tsuen Wan, Kwai Chung, Castle Peak, Shatin, Yuen Long and Tai Po were prepared by the Town Planning Office.

In 1968, the third new town, Tuen Mun New Town, was established on the western side of the New Territories. It provided 270 hectares of land for industrial use. Continuing with the development of the New Territories, another new town, Shatin, was subsequently established. It provided 54 hectares of land for industrial use. All new towns in Hong Kong were

[10] Wong C.O.Y. The Evolution of Industrial Land Use Planning in Hong Kong, Unpublished B. Sc. (Surveying) dissertation, The University of Hong Kong. 1999. pp. 65-71

developed with a plan for self-sufficiency. Transportation, schools, residence and other necessary facilities were provided enabling the “thinning out” of industrial activities and the migration of population from the urban area.

In 1963, a new payment scheme for industrial land disposal was introduced. In this scheme, purchasers of industrial land were permitted to pay land premia by installment. This scheme was introduced as a measure by the government for keeping pace with the rapid development by the time. The installment methods provided flexibility to industrialists as they needed not tie up by a large amount of cash for the initial payment of land premia. The purchase of industrial land was also encouraged in this way.

Further concessions to industrial development were also made in 1968. Under a new policy, owners of industrial lots were allowed to assign their lots without fulfilling the respective building covenant or paying off the outstanding premia installments. The remaining responsibilities could be undertaken by the assignees. The new measure allowed the development of undeveloped industrial land whose original land owners did not have the incentive to develop for whatever reasons.

Industrial Land Policies in 1970s[11]

In 1973, the Government introduced a new land policy which allowed industrial land to be sold either by public auction or tender on a "restricted user" basis. There were special terms for the lots to be used by a specifically designated industry. In 1974, the Trade Development Council specified that projects qualified for the special treatment should have the following industrial processes:

1. new to Hong Kong, or showed a significant technological upgrading of an industrial process that already existed;
2. at a generally higher level of technology than that of the manufacturing industry at the time;
3. provided employment opportunities at a generally higher level of skill, especially for male workers;
4. land-intensive and by their nature unable to be carried on in multi-storey industrial buildings; and
5. could not otherwise be established or developed in Hong Kong.

[11]Wong. C.O.Y. The Evolution of Industrial Land Use Planning in Hong Kong, Unpublished B. Sc. (Surveying) dissertation, The University of Hong Kong. 1999. pp.71-78

Applicants for the above special treatment could apply for industrial land either through tendering on a restricted user basis or being offered the land by private treaty on the advice of the Executive Council if tender was not suitable.

In 1974, in light of the increased demand for general industrial land near centres of population, the building of industrial estates was proposed in the Legislative Council. In the mean time, it was proposed to create a corporation to tackle the issue of industrial estates. The function of the corporation should include the following,

1. involving in making decision and the subsequent enforcement of lease conditions
2. processing of applications, the general layout of the estates, the road and sewage systems
3. providing utility installations
4. coordinating, directing and rationalizing the policies related to the development of industrial estate

In 1975, the Government announced the construction of the first industrial estate in Tai Po. This estate had 95 hectares of land, including 73 hectares for industrial uses. It aimed at providing land for heavier industry.

The Hong Kong Industrial Estates Authority Bill 1976 was agreed by the Estates Provisional Council. On the advice from the Executive Council, the name of the Authority was changed to the Hong Kong Industrial Estates Corporation on 1 March 1977.

In May 1977, a Special Committee was appointed by the Government to investigate the potential area for urban development in the future. The reports of the Committee suggested some objectives in provisions of industrial land. They were stemmed from:

1. The concept of developing new towns as “balanced” communities, where the supply of employment opportunities should parallel the predicted growth of population; and
2. The recommendations of the Advisory Committee on Diversification, which called for increasing the supply of industrial land and suggested to stabilize the land price in order to make investment in Hong Kong become attractive, so that this could broaden the territory’s industrial base.

In 1981, the Hong Kong Industrial Estates Corporation provided pre-built factory premises for those who were in need of production without delay. The industrial estates were an integral part of new towns and there

were comprehensive housing, education and recreational facilities for the labour. The maximum plot ratio of the industrial lots was restricted to 2.5 only. In 1983, another industrial estate in Yuen Long was established. It consisted of 72 hectares of land out of which 67 hectare were for industrial use.

The finance for the establishment of industrial estates came from the Government's Development Loan Fund. The land for the estates was granted by private treaty with lease term of 15 years. The lease term would be extended from 1997 to 2047 in accordance with the Sino-British Joint Declaration. This provided certainty for the developers for future development.

Industrial Land Policies in 1980s[12]

In 1983, the Special Committee on Land Supply had made an assessment on industrial land concerning the long term forecast of land supply and the result was compared with the territorial employment needs based on population projections to the year 1991 onward. The result concluded that there would be excess supply of land in the following ten

[12]Wong.C.O.Y. The Evolution of Industrial Land Use Planning in Hong Kong, Unpublished B. Sc. (Surveying) dissertation, The University of Hong Kong. 1999. pp. 79-82

years on the basis of the planning standards and development trends at that time. (Special Committee on Land Supply, 1984).

In view of the result of the study, the Committee suggested three measures to reduce the surplus land, which are listed as follows,

1. to revise the planning standards as to improve the local environment from a town planning standpoint;
2. to adopt a flexible approach on land disposal to facilitate development of industrial land in response to market demand; and
3. to rezone land for industrial purposes to alternative uses.

In response, the Government accepted the recommendations and reduced the maximum plot ratios for land disposal purposes which encouraged diversification of industry. After the revision of the planning standards, the plot ratios requirement varied in three different geographic areas[13], which were

1. the Metropolitan Area (Hong Kong, Kowloon, Tsuen Wan, Kwai Chung, Tsing Yi);

[13] The report of the Special Committee on Land Supply (1984) suggested that the plot ratios varied between 3.5 to 9.5 in the New Territories and between 5 to 12.5 in the urban areas.

2. Shatin, Tuen Mun and Tai Po; and
3. Yuen Long, Fanling, Sheung Shui and other planned areas.

The new planning standards applied to areas both on a territorial and a district basis. The new standards allowed the spreading of investment over a wider area, improved the local environment of the industrial areas, and stimulated direct investment by the end-users of the industrial land.

In April 1983, the Government introduced a "sale by application" program so as to encourage land users to acquire land. In the new approach, land which was unlikely to be sold or had failed to be sold in previous auctions was put on the market for application by developers. The developer could then suggest an ideal plot ratio and a price for the particular piece of land. The development was required to deposit some proportion of the acceptable price as a guarantee to bid to that amount. The particular piece of land was then put on sale by auction at the suggested plot ratio. This new approach offered flexibility in terms of plot ratio and this could bridge the gap between supply and demand of industrial land.

In addition to "sale by application", another measure was recommended and it was the rezoning of industrial land into other uses. It

was suggested rezoning some 40 to 50 hectares of industrial land into public rental and private housing.

In 1983, the Land Development Policy Committee accepted the recommendation and 42 hectares of industrial land were rezoned to other uses. More rezoning took place later to reduce the surplus industrial land.

Industrial Land Policies in 1990s[14]

In the late 1980s, the Government finished a series of major planning studies concerning the long-term development in Hong Kong. One of them was the Port and Airport Development Strategy Study (PADA). It included the firm plans to develop the new airport as well as proposals to develop Northern Lantau and large parts of the Western Territories for industrial and trade related activities. The other study was the Metroplan Study which emphasized on the development of the urban area of Hong Kong Island, Kowloon, and Tsuen Wan/Kwai Chung, with special reference to the development opportunities relating to the relocation of the airport from Kai Tak to Chek Lap Kok. In 1992, another study was also finished which was about the building of a Science Park in Hong Kong.

[14] Wong.C.O.Y. The Evolution of Industrial Land Use Planning in Hong Kong, Unpublished B. Sc. (Surveying) dissertation, The University of Hong Kong. 1999. pp. 82-88

Port and Airport Development Strategy (PADS)

The Port and Airport Development Strategy Study began in 1989 and the 'core project' completed in 1998. The study provided a firm plan to construct a new airport in Chek Lap Kok in Northen Lantau together with new and large scale housing and industry development. Beside the airport, the study also dealt with the gradual expansion of the port which was initially at Kwai Tsing and later in Tuen Mun. Other major components of the study were the sophisticated network of transportation infrastructures and reclamations in Central, West Kowloon and Kwai Tsing. The different parts of the PADS were complementary to each other for reshaping the urban industrial area and at the same time shifting the industrial area to the New Territories.

With the implementation of the PADS, relocation of industries from the urban area was expected and this allowed the 'thinning out' of the industry from the congested urban area to the Western New Territories and Northern Lantau. Following the relocation, the original obsolete and undesirable urban industrial land could be transformed into other use which could provide better environment for enhancing the living standards.

Metroplan

Metroplan was a sub-regional strategic plan aiming at providing a basis for the restructuring of the urban area around the Victoria Harbour by means of redevelopment and reclamation.

For industrial development, the Metroplan aimed at "thinning out" and improving the environment in the congested and obsolete urban industrial area. To do so, factories were relocated either within the Metropolitan area or to new towns in the New Territories. The implications of Metroplan on industrial land were about the same as the PADS.

Territorial Development Strategy (TDS)

A review of the Territorial Development Strategy was conducted in July 1990. In the part for industrial development, the Government conducted a study named "Industrial Land Development Strategy" (ILDS) which revealed that there was a trend for the relocation of industrial activities to the various part of the Pearl River Delta where land and labour costs were lower. This was mainly due to the "Open Door" Policy of China. The study also identified there was surplus industrial land. To cope with the problem, rezoning was taken place. Preference was given to special industries like chemical processing industry, water-intensive industry and PADS deep

waterfront installations. Moreover, more land was needed to relocate polluting industries and the new industries.

Approaching the late 1990s, the economy of Hong Kong was undergoing a structural change. The manufacturing sectors which originally located their production base in Hong Kong have moved to the mainland due to the cheap labour and low rent. The four major industries in Hong Kong are now financial services, trading and logistics, tourism, and other producers' services.[15]

Revised Planning Standard and Guidelines

In light of the restructuring of the industrial sector due to the "Open Door" policy of the mainland, the revised Planning Standard and Guidelines were issued in 1997. The guidelines was revised based on two studies, namely "Study on the Provision of Industrial Premises and the Development of Planning Guidelines and Design Parameters for New Industrial Areas and Business Parks completed in late 1996" (i.e. the PIPNIB Study) and the "Study to Review the Planning Framework for the Reservation and Provision

[15] Census and Statistics Department, http://www.censtatd.gov.hk/hong_kong_statistics/four_key_industries/index.jsp

of Industrial Land" (Industrial Land Review Study)[16] which was on-going and completed in end 1999.

The strategy in the guideline recognizes that industrial and office uses are not mutually exclusive but are compatible with each other. This view introduces the concept of "Business" zone in industrial area. The revised version of the guidelines also sets out the industrial land use typology as well as the provision standards and locational guidelines for industrial developments which includes development parameters and planning criteria like lot size, plot ratio, site coverage, worker density, traffic engineering requirements and supporting facilities. The guideline also recognizes that "manufacturing industry will increasingly concentrate on higher technology processes, research and development functions and service-oriented activities." In light of this trend, the guideline recommends that "the planning and provision of industrial land and premises in Hong Kong shall follow this trend."[17]

Revised Town Planning Board's Guidelines (TPB PG-No. 25B)[18]

In 2001, the Town Planning Board revised the guidelines for use/development within "industrial" zone and it replaced some of the

[16] Hong Kong Government Planning Department, Hong Kong Planning Standards and Guidelines Chapter 5, (Hong Kong: Printing Department, 1997)

[17] *Ibid.*

[18] See Appendix I

previous guidelines relating to industrial use (TPB PG-No. 1A, TPB PG-No.3A, TPB PG-No.4A and TPB PG-No.7A). The new guideline was issued in view of the structural change of the industrial sector and the migration of the manufacturing industry from Hong Kong to the mainland. With the introduction of the "Other Specified Uses (Business)"[19] zone, the Board aims at "allow[ing] maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings, as well as in the development of new buildings for both commercial and clean industrial uses." Other than office and commercial use, the Board also recognizes the growth of the IT and telecommunication industry in Hong Kong. To cater for their expansion, "the Board sees the need to expand the scope of uses to be permitted in the "Industrial" ("I") zone to accommodate such industries." In addition, the Board understands that there is a need for supporting industrial-related non-manufacturing activities whose main manufacturing activities have been moved to the mainland. In this sense, the Board "relax[es] the control on offices related to industrial uses and trading firms which require large storage space and frequent loading/unloading. These uses are already permitted in I-O buildings, and will now be permitted as of right in the "I" zone". The new guideline provides the definition of various uses. (TPB PG-No. 25B, pp. 1-2)

[19] See Appendix II for Town Planning Board Guidelines for Development within "Other Specified Uses (Business)" Zone (TPB PG. 22B)

CHAPTER 3

EMPIRICAL STUDY ON THE DEMAND FOR INDUSTRIAL ACTIVITIES IN HONG KONG

In this dissertation, 40 land records are obtained from the Land Registry for investigation. Kwai Chung is selected as the sample area as it is a traditional industrial area which was built in the early 1960s and is now undergoing restructuring. It is representative enough for the general environment of industrial land in Hong Kong.

Land Registry

In Hong Kong, a deeds registration system is operated under the Land Registration Ordinance (Cap.128). The preamble of this legislation states the reason for the need of land registration which is, "it is expedient to prevent secret and fraudulent conveyances, and to provide means whereby the title to real and immovable property may be easily traced and ascertained." It is believed that the disclosure of ownership and other incumbrances of properties can facilitate investment and economic development in Hong Kong.

> "The Land Registry is responsible for registering all documents affecting land. The registration of a document is effected by delivering the document to the Land Registry with a memorial containing the essential particulars of the document and paying the prescribed fee. Upon checking and ensuring that the document meets the requirements of the Land Registration Ordinance and its Regulations, these particulars are then entered into a computerized land register for the relevant piece of land or property. Each computerized land register provides a complete record of all transactions affecting a property, starting from the grant of a government lease."[20]

Land records are basically kept to facilitate property transactions in which the information for registered owner of the property and the incumbrances are important. The search for land records provides the required information. A purchaser and mortgagee can check the nature of the title he/she is intending to purchase or accept before transaction as a way of security guard.

[20] Hong Kong Government Land Registry, *The Land Registry*, (Hong Kong: Printing Department, 2005)

Types of Land Records[21]

The Land Registry provides the following kinds of records for public inspection upon payment of fee,

1. Land Register—A register showing the ownership particulars of each property and any incumbrances registered against the property, e.g. Legal Charge, Release, Agreement for Sale and Purchase, Court Order, etc.
2. Memorial—The form specified by the Land Registrar for registration which contains the essential particulars of the accompanying deed lodged for registration.
3. Memorial Day Book—A record of all the Memorials lodged for registration each day with the essential particulars of each Memorial.
4. Government Lease—A lease of land granted by the Government including any instrument whereby the terms of the lease may have been extended or the provisions thereof varied, and any agreement for a Government Lease such as New Grant, Conditions of Sale, Grant, Exchange, etc.

[21] Hong Kong Government Land Registry *How to Conduct Searched of Land Record*, (Hong Kong: Printing Department, 2005)

5. Block Government Lease—A lease issued for a Demarcation District/ Survey District or a block of lots. It contains the lease conditions and a schedule showing the name of owner, area, class and annual rent of each lot.

(Adapted from "*How to Conduct Searches of Land Record*", the Land Registry, 2005)

Data Collection

The 40 land records are randomly selected from identified properties in the planning statistics obtained from the Town Planning Board with the applied uses located in Kwai Chung. The purpose is to find out whether there is any relationship between the statutory and the lease requirement and at the same time evaluate the demand for industrial land. Therefore, the sample contains cases either with or without planning approvals. The sample contains 18 units which are located on the Ground Floor and 17 units on other floors. The remaining 5 records refer to the information of the whole lots of the land.

The land uses for the selected lots are obtained from inspecting the respective leases. In addition, the waived uses are obtained from inspecting

the waiver letters obtained from the memorials registered in the Land Registry. For data relating to planning applications and reviews, the website of the Town Planning Board provides the required information.

Data Interpretation

From the land records, the dates of waiver letters were collected and a trend is drawn from the data obtained. Among the 40 land records, we find that 12 of them have applied for waivers starting from the dates for the grant of respective leases. The waiver applications collected include those with plans; re-portion or temporary in nature and a total of 22 waivers has been recorded from the sample.

A waiver is similar to a lease modification except that a waiver is temporary in nature. A waiver is applied when a temporary change in land use is required. It is not statutorily governed but represents the contractual relationship between the government as the landlord and the lessee. For waiver application, the lessee is required to hand in the application to the relevant District Lands Office of the Lands Department. The approved waiver is only effective upon entering into an agreement for the proposed change and the payment for the waiver charges agreed by the contractual parties and upon the payment of an administration fee within a period

specified by the District Lands Office. A waiver permission is conveyed by a 'waiver letter'. Since a waiver is contractual in nature and represents a mutual agreement between the contractual parties, no appeal procedure is available for unsuccessful application whether the amount of the charge is an issue or not.

A waiver is required when an intended use(s) and/or its (their) development intensity (e.g., plot ratios, building height, and number of storeys) on a piece of land is /are not permitted under the terms of the land lease for that same piece of land. Waiver application is required for a temporary change in use in an existing building, or upon redevelopment during the term of the lease. Therefore, waiver can be used as an indicator for the demand for change in land use. In this dissertation, the demand for change in land use within the industrial area in Kwai Chung is examined.

Table 3.1. Number of Waiver Application in 12 land records in Kwai Chung from 1986-2005

Year	No.of Waiver(s) recorded
1986	1
1987	1
1988	0
1989	0
1990	1
1991	0
1992	0
1993	1
1994	2
1995	1
1996	0
1997	2
1998	1
1999	0
2000	1
2001	1
2002	4
2003	3
2004	2
2005	1

The table above shows the number of waiver recorded from the sample in Kwai Chung. The period with waiver record is from 1986 to 2005. From the Table, we can see that waiver applications before 2001 were scattering and fewer. However, starting from 2002, applications for waiver increased steadily. This shows that the demand for a change in land use from industrial to other uses has increased. Looking at the data on a 5-year basis (Figure 3.1.), there are 3 waiver applications from 1986 to 1990, 4 applications from 1991 to 1995 and from 1996 to 2000 and 11 applications from 2001 to 2005. The number of waiver applications has increased

substantially in the recent 5 years. This implies that there was an increasing demand for a change in land use from industrial to other use. The increase in demand might be due to the structural change in Hong Kong's economy. Manufacturing is no longer the main economic driver in Hong Kong. Many factories have moved to the mainland, thanks to the low operating costs there. Instead, the service industry has replaced the manufacturing sector as the main GDP contributor. This may be the reason why the number for change in use from industrial to other uses has increased. The rise in the number of waiver application may also be an influence of the relaxed statutory control in industrial zones and the introduction of "Other Specified Use (Business) Zone", though the Lands Department claimed that the current practice for lease modification and waiver had not been changed[22]. It is because the applicant must fulfill both of the statutory requirement and lease modification or waiver for a change in use of land. If the applicant has succeeded in the statutory requirement, the possibility that he will apply for lease modification or waiver would be greater. Since the TPB has relaxed its control in 2001, the rise in the number of waiver applications is expected assuming that the TPB follows its policy in granting planning applications. Some inaccuracy may be contained in the information shown on land records for the year 2005, due to delays in information transfer.

[22] Refer to Practice Notes Issue No. 2/2001 from the Land Administrative Office of the Lands Department

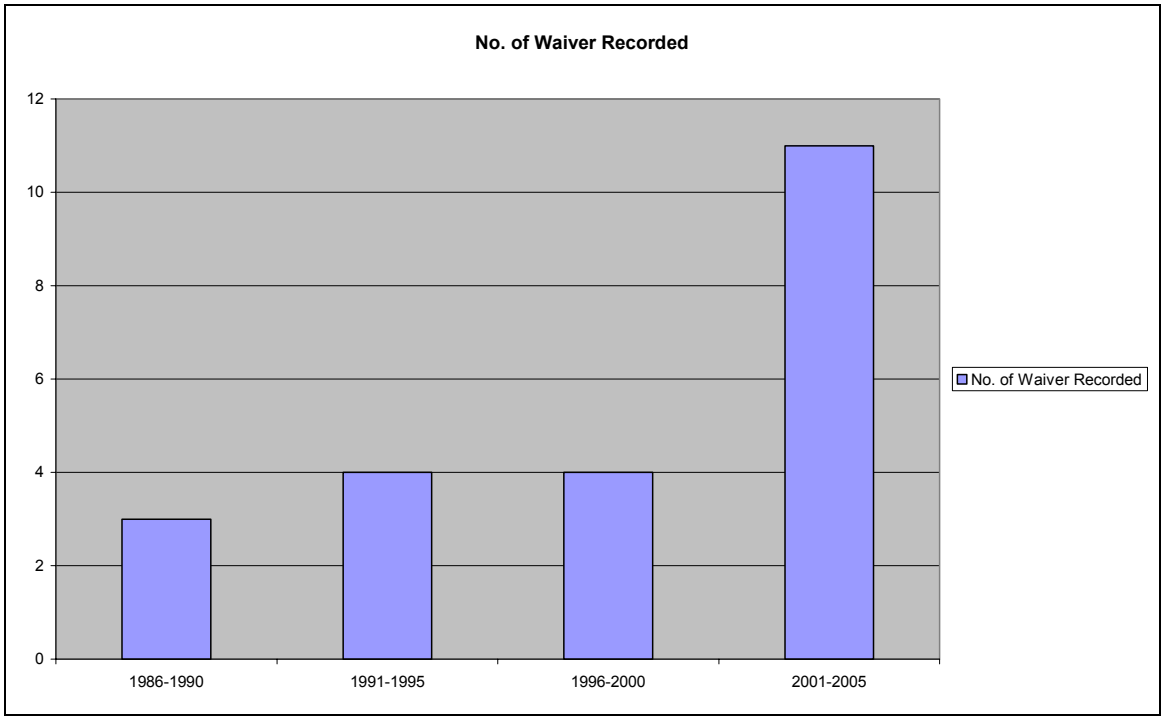

Fig. 3.1. Number of waiver applications in records for 12 land parcels in Kwai Chung from 1986 to 2005

The relationship between the statutory requirements and waiver applications and other detailed information on the waivers are shown in the following Table 3.2.

Table 3.2. Detailed information on waiver applications.

Case Number	Date of Waiver Letter	Recorded Date in Land Registry	Lot Number
1	13/9/86	20/10/86	KCTL311
2	22/7/87	29/8/87	KCTL140
3	23/8/90	27/9/90	KCTL281
4	26/4/93	28/4/93	KCTL311
5	13/11/93	21/3/94	Section A of KCTL129
6	24/1/94	21/3/94	KCTL115
7	24/7/95	10/8/95	The remaining portion of Lot no. 325 in D.D. 444
8	4/11/97	11/11/97	KCTL115
9	2/12/97	5/12/97	The remaining portion of Lot No. 325 in D.D. 444
10	3/7/98	20/8/98	KCTL134
11	10/10/00	23/11/00	Lot No. 291 in D.D. 44
12	26/2/01	6/3/01	The remaining portion of Lot no. 325 in D.D. 444
13	6/2/02	6/3/02	KCTL115
14	7/5/02	15/5/02	The Remaining portion of Lot No. 361
15	13/6/02	20/6/02	KCTL140
16	21/6/02	3/7/02	KCTL134
17	18/11/03	28/11/03	KCTL281
18	27/11/03	11/12/03	Section A of KCTL129
19	12/12/03	23/12/03	KCTL281
20	4/8/04	9/8/04	Section A of KCTL129
21	17/11/04	23/11/04	Lot No. 291 in D.D. 44
22	4/8/05	6/9/05	KCTL311

Table 3.2—Continued

Case Number	Memorial Number	Use Before Waiver Application	Use After Waiver Application
1	TW406507	Industrial or godown purpose	Canteen
2	TW462280	Industrial or godown purpose	Canteen
3	TW695771	Industrial or godown purpose	Bank
4	TW884435	Industrial or godown purpose	Fast Food Shop
5	TW942942	Industrial or godown purpose	Canteen
6	TW942943	Industrial or godown purpose	Bank
7	TW1015521	Industrial or godown purpose	Canteen
8	TW1180515	Industrial or godown purpose	Bank
9	TW1186099	Industrial or godown purpose	Stationery shop and a metal hardware shop as well as storage ancillary to the abovementioned
10	TW1233108	Industrial or godown purpose	Canteen
11	TW1380651	Industrial or godown purpose	Fee paying public carpark for the parking of private cars and light goods vehicles
12	TW1393439	Industrial or godown purpose	Retail Shop Selling Newspaper
13	TW1453702	Industrial or godown purpose	Canteen
14	TW1462112	Industrial or godown purpose	Bakery Shop
15	TW1466744	Industrial or godown purpose	Newsstand
16	TW1468343	Industrial or godown purpose	Fast Food Shop
17	TW1548103	Industrial or godown purpose	Local Provisions Store
18	TW1549874	Industrial or godown purpose	Property Agency Office
19	TW1551603	Industrial or godown purpose	Showroom
20	TW1590389	Industrial or godown purpose	Law Firm Office
21	TW1608167	Industrial or godown purpose	Fee paying public carpark for the parking of private cars and light goods vehicles
22	05090600200138	Industrial or godown purpose	Fast Food Shop

Table 3.2—Continued

Case Number	S.16 Case Number	Date of S.16 Application	Date of S.17(1) Review	Applied Use in S.16 Application	Decision of S.16 Application	Decision of Review
1	A/KC/110	19/6/97	N/A	Fast Food Shop	Approved	N/A
2	A/KC/262	13/7/01	N/A	Retail Shop (Newsstand)	Approved with conditions	N/A
3	A/KC/276	8/11/02	N/A	Retail Shop (Local Provisions Store)	Approved with conditions	N/A
4	A/KC/110	19/6/97	N/A	Fast Food Shop	Approved	N/A
5	A/KC/134	20/9/93	N/A	Office(Property Agency)	Rejected	N/A
6	A/KC/122	8/1/93	N/A	Bank	Approved with Time Limit	N/A
7	A/KC/236	14/8/98	N/A	Retail Shop (Selling Newspaper)	Approved with conditions	N/A
8	A/KC/122	8/1/93	N/A	Bank	Approved with Time Limit	N/A
9	A/KC/193	12/1/96	N/A	A Stationery Shop and a Metal Hardware Retail Shop	Approved	N/A
10	A/KC/247	16/7/99	N/A	Hardware Retail Shop	Approved with conditions	N/A
11	A/KC/234	31/7/98	N/A	Public Car Park (Temporary Fee-paying Car Park for 3 Years)	Approved Temporarily	N/A
12	A/KC/122	8/1/93	N/A	Bank	Approved with Time Limit	N/A
13	A/KC/228	20/2/98	12/6/98	Property Agency Office	Rejected	Rejected
14	A/KC/256	2/2/01	N/A	Barkery Shop (Retail Shop)	Approved with conditions	N/A
15	A/KC/262	13/7/01	N/A	Retail Shop (Newsstand)	Approved with conditions	N/A
16	A/KC/247	16/7/99	N/A	Hardware Retail Shop	Approved with conditions	N/A
17	A/KC/276	8/11/02	N/A	Retail Shop (Local Provisions Store)	Approved with conditions	N/A
18	A/KC/134	20/9/93	N/A	Office(Property Agency)	Rejected	N/A
19	A/KC/284	16/5/03	N/A	Showroom	Approved	N/A
20	A/KC/134	20/9/93	N/A	Office(Property Agency)	Rejected	N/A
21	A/KC/234	31/7/98	N/A	Public Car Park (Temporary Fee-paying Car Park for 3 Years)	Approved Temporarily	N/A
22	A/KC/110	19/6/97	N/A	Fast Food Shop	Approved	N/A

From the above table, it can be seen that most of the waivers were applied following respective successful planning applications. Moreover, most of the applied uses in planning applications are also the same as those existed on the respective waiver letters. This further verifies that there is a true demand for uses other than industrial use in the Industrial Zone of Kwai Chung.

The above result is also consistent with the rentals and price index of private flatted factories[23] obtained from the Hong Kong Property Review 2005 published by the Rating and Valuation Department.

Table. 3.3 Rental and price index for private flatted factories in Hong Kong from 1995-2004

Private Flatted Factories- Rentals and Price Indices (1999=100)		
Year	Rents	Prices
1995	146.9	198.7
1996	132.4	171.4
1997	132.5	168.9
1998	118.1	131.8
1999	100	100
2000	95.4	91.2
2001	90.3	82
2002	82.7	74.8
2003	74.9	71.7
2004*	77.5	87.7
*Provisional The indices are in respect of upper floor units only.		

(Adapted form Hong Kong Government Rating and Valuation Department (2005), Hong Kong Property Review, Hong Kong: Printing Department)

[23] Private Flatted Factories comprises premises designed for general manufacturing processes and uses, including offices, directly related to such processes, and normally intended for sale or letting by the developers. Specialized factories, as described below, are excluded. Similar premises built by the Housing Authority are not included. (Hong Kong Property Review 2005)

Starting from 2000, the rents and price of private flatted factories have decreased. As the decrease in demand is one of the reasons for the drop in price, the result further provides an evidence to show that the demand for industrial land has decreased. Moreover, the 'price' represents the maximum value a consumer is willing to forgo to obtain a certain amount of goods (Lai and Yu 2003)[24]. The decrease in price and rents for units in private flatted factories shows that the maximum value that the people would forgo to obtain industrial units has decreased. This may indicate that the demand for industrial land use has dropped. The figure for 2004 is provisional and may not be accurate. Even so, the small increase in a single year is not representative.

[24] Lai, L. W.C. and Yu, B.T(2003) *The Power of Supply and Demand*, Hong Kong: Hong Kong University Press

CHAPTER 4

LITERATURE REVIEW

Previous Research on Development Control

Over the past decades, there are many planning researches regarding development control. One of the planning researchers, Underwood (1981), focused on two broad aspects, which are policy and action.

Policy

Policy issues can be further subdivided into three areas.

1. The role of plans as a basis for development control decision;
2. material considerations; and
3. categorization of applications.

An illustration for the above three areas will be given below.

The role of plans

The first area deals with the questions: how far are planning policies actually adhered to and implemented through development control? (Underwood 1981) This has already raised policy specific issues on controversial matters like housing land availability and constraints on industry. Indeed, the issue has attracted a number of researches. Blacksell and Gilg (1977) examined development control in the Area of Outstanding Natural Beauty (A.O.N.B). Anderson (1981) evaluated development control in the Sussex Down A.O.N.B. Pountney and Kingsbury (1983) investigated the relationship of and the extent of integration of the development plans and development control in relation to selected local authority planning departments. In addition to the above in the United Kingdom, other researches were also done in America. Daniel and Lapping (1984) evaluated Vermont's land use control programme "Act 250". There are also more recent researches. Keyes (1986) investigated the extent to which the "Green Belt Policies" was implemented by development control. Davies *et. al.* (1986) examined the relationship between development plans, development control and appeal. There is also similar research in Hong Kong. Tang and Tang (1999) investigated the effectiveness of "two-tier plot ratio" system. Their methodologies in the research will be reviewed later in this dissertation.

Material Considerations

The second area deals with the questions of what factors it is permissible to consider within the scope of development control. (Underwood 1981) In an attempt to find out "what the material considerations are", Purdue (1977) looked into the scope of discretion of planning authorities. Underwood (1981) found that the planning authority may use standard reasons of rejection to cover up its real decision criteria. Davies *et. al*. (1986) concluded 87 planning considerations which can be separated into two areas. One of these is practical considerations about the physical form and quality of development. The other is strategic considerations which includes location, timing, planning gain, financial viability, to mention but a few. Though Davies claimed that there were a lot of considerations for the local authority to deal with in development control, Willis (1995) argued that the authorities only took into account a few factors in their decision.

McAuslan (1980) highlighted the importance of physical and environmental factors. Healey *et al.* (1988) found that other factor like marketability assessment by builders is also on of the considerations. However, Bramley *et al.* (1995) found that planning policy is autonomous of

the market and the granting of planning permission responded weakly to market factors only.

In Hong Kong, the Planning Department has made the following announcement:

> *usually* take into account such factors as the *planning intention* and *Government policies, social, economic and environmental impacts* of the development on the wider area traffic and infrastructural implications, and compatibility of land uses. (emphasis added)

(Planning Department 1995, p.27)

Tang *et al.* (2000) claimed that the word "usually" enhanced the ambiguity in the decision-making process in determining planning applications. Although the Secretary for Planning, Environment and Lands claimed that the planning process should be open so as to provide indication to developers, the planning authorities acted in contrast to the norms thanks to the black box decision-making process.

Many other researches have been done to verify the contrasting behaviour of the planning authorities. Lai and Ho (2001a, 2001b, 2001c,

2001d, 2002a, 2002b, 2002c, 2003) examined the extent to which the planning authorities adhered to their guidelines. Town Planning Board (TPB) Guidelines are issued to enhance the certainty of the decision-making process by helping applicants in handling their planning applications. However, the result of Lai and Ho (2001a, 2001b, 2001c, 2001d, 2002a, 2002b, 2002c, 2003) reveals that the extent of the authorities' adherence to the guidelines is unknown. This results triggered many researches into the decision criteria of the TPB.

Tang and Choy (2000) examined the discernable criteria used by the TPB by looking at 162 observations of office use in urban Kowloon area. Tang *et. al*. (2000) further examined the issue by looking at some other 104 observations of office use on Hong Kong Island.

More specifically, Lai and Ho (2001b, 2001c, 2002a) further examined the criterion that "the Board will consider these applications on their individual merits" taken from the Explanatory Statement to OZPs by testing the impact of exogenous government policies on planning permissions.

Categorization of applications

The third issue deals with the distinctions between "controversial and non-controversial", "major and minor" and "harmful and harmless" in development control. It deals with the extent of development subject to control, the degree of control exercised (particularly on detailed matters of design), and the distinction made in the regulatory process between matters of public and of private interest (Underwood 1981). However, the third issue is not the concern for this dissertation.

In Hong Kong, there are also controversial development projects which a balance should be strived between economic growth and environmental conservation. Some researches have also been done to investigate the land use policies in some special areas. Lai and Ho (2001a) investigated the planning criteria for low-rise residential development in Green Belt zones. Lai and Ho (2001b) also examined the planning applications for small houses[25] which is a kind of New Territories Exempted Houses.

[25] Small House Policy is a special kind of land and housing policy in Hong Kong. Only adult male indigenous villagers in the New Territories can apply to build a small house under this policy. A small house is a house of three storeys, each of which is confined to an area of 700 square feet. Small house policy can be applied to any private land or, in case that the applicant has no land, government land at no premium, provided always that the site is within the so-called "village environ' of an indigenous village. (Lai and Ho, 2001b)

Action

Action issue is about the extent and definition of delays, consultations, negotiations, local authorities and procedures as well as accountability in the development control process (Underwood 1981). Only the issue of power struggle in the decision-making process will be discussed in this dissertation.

Data for Development Control Research[26]

The Dobry (1975) enquiry demonstrated the successfulness of using planning applications statistics in policy articulation. Since then, many researches in development control have been done by using planning statistics. Examples are Staley (2001) in America and McNamara and Healey (1984), Preece (1990), Sellgren (1990), Brotherton (1984, 1992a, 1992b), Gilg and Kelly (1996) and Willis (1995) in the United Kingdom.

The use of planning statistics in researches in Hong Kong is also common. Started by Staley (1994), he analyzed the costs of delays. His analysis was further supported by the proposal in the Review of the *Town Planning Ordinance* 1991 (Planning, Environmental and Lands Branch 1991). Staley (1994) found that transaction costs of development would be

[26] Lai and Ho (2001a, b, c, d, 2002a, b, c)

increased by the introduction of 'planning certificates'. In other studies, Lai (1997a, 1997b) also arrived at the same result. In the above studies, Lai critically examined the *Town Planning Bill* 1996 (Planning, Environmental and Lands Branch 1996) and concluded that the proposed planning legislation would cause delays to the development process and lead to higher transaction costs of waiting. This would in turn bring about rent seeking[27] activities that would favour larger developers.

Empirical analysis of development control statistics was widely used in the evaluation of development process in Hong Kong. (Willis 1995; Tang and Tang 1999; Lai and Fong 2000; Tang and Choy 2000; Tang et. al. 2000; Lai and ho 2001a, 2001b, 2001c, 2001d, 2002a, 2002b, 2003c).

Aggregate and Non-aggregate Data

Aggregate and non-aggregate data are the two types of data for development control. Carlos (1979) gave them the following definitions:

[27] The behaviour of competitors where property rights are not clearly defined. (Lai 1997a)

"If each observation in our data set consists of a value of the attribute vector a (representing an individual who has been interviewed), and an observed choice, we say that we have *disaggregated data*. If, on the other hand, the data include only information on groups of people, we call it aggregated or grouped data." (Carlos 1979, p.6)

Aggregate data can be used to give a general trend while non aggregate data can be used to study discrete characteristics.

Aggregate Data and its Validity

Many researchers are contented with the use of aggregate data in land use policy or development management studies. However Lai and Ho (2002a, pl 572) argued that "these critics abandon the road to progress in planning, namely, the application of established statistical techniques for analysis of existing development control data". Other researchers (Brotherton 1982, 1992a, 1992b; McNamara and Healey 1984; Buller and Hoggart 1985; Larkham 1986, 1988, 1990a; Preece 1990; Sellgren 1990; Lai and Ho 2001d) also found out the deficiencies for using aggregate data. These deficiencies include the ambiguous definitions and measurements of planning variables; the problems with the choice of weighing criteria; the loss of essential

information about individual planning permission statistics, notably as development size and specific planning conditions.

Lai (2001c) declared that "although there is no doubt that aggregate data are useful in many circumstances, non-aggregate statistics open the gate of rigorous analysis of three types of planning studies" (Lai and Ho 2001c, p. 2426). The first one is the direct measurement of the effectiveness of the development control upon the externalities (Lai 1994, 1997b). This can be used as an alternative to hedonic pricing analysis (Fischel 1980; Anderson 1982; Benson 1984; Bramley 1993). The second one is the evaluation of behaviour of players in the land market. This is used in some researches in development pressures (Blacksell and Gilg 1977; Anderson 1981; Underwood 1981; Brotherton 1982). The third one is about the empirical verifications of economic theories concerning the behaviour of planning authorities. Studies have been done to investigate the consistency of the planning authority in applying its own or other exogenous policies and the existence of rent seeking behaviour. It is believed that there is rent seeking behaviour in the planning permission systems favouring larger developers who are more resourceful and have greater bargaining power with the planning authorities (Benson 1984; Gifford 1987; Mills 1989; Tullock 1993). However, there are debates on the validity of government intervention in

land market and the infringement of private property rights on land (Fischel 1980, 1985; Lai 1997b).

In spite of the inherent deficiencies of aggregate data, its use is very popular in many research areas. In Britain, the data can be obtained from County Councils' Gazette published weekly by County Councils, or Development Control Statistics prepared by Department of Environment since 1960s. Different methods are developed by different researchers. However, usually, data are collected for several years and a trend is identified or the data inside and outside a policy are compared (Sellgren 1990).

Supportive Arguments for the use of Aggregate Data

Although there were many problems for using aggregate data, Sellgren (1990) suggested that the aggregate studies of development control records were not invalid. His reason is that " although the planning system may be seen as a negotiative one, negotiation is not conducted in a vacuum but takes place within a variety of constraints which themselves provide a part of the structural framework in which decision making operates" (p.36).

By using aggregate data, a general picture could be developed which can act as a base for more detailed case studies which could "penetrate beneath the 'hard facts' readily obtainable from aggregate data" (Larkham 1990a, p.4). Larkham (1990a) argued that although case studies "would permit examination of the minutiae of the system of processing applications" (p.6), they could "rarely stand alone" (p.5) and they required "the support of data gathered from wider area…in order to substantiate the argument that the case study is not atypical" (p.5).

Healey (1991) also supported this approach. He confirmed the "cascade" approach which moved from a broad overview through to case studies at various levels of detail. This encouraged the studies on the implementation of development plans.

Larkham (1990b) suggested the combination of other data into development control data for investigation. These data were "naturally both numerous and diverse" (p.179) and could be used to supplement development control data. Buller and Hoggart (1986) have already demonstrated the combined use of different data. In their studies, "the features of an individual planning application that were most commonly associated with its approval" were input into a multiple regression method. The dependent variable was Residential Land Availability; the independent

variables include “Area of projectionist designations”, “Urban Proximity”, “Number of Amenity Society”, “Number of Members in each Amenity Society”, and so on.

The Use of Development Control Data

Gilg and Kelly (1996) conducted a comprehensive review on the way to collect data and the means to analyze the development control process. Four approaches are concluded to analyze development control decisions which are,

1. simple statistical and cartographic analysis;
2. examining the data derived from the decision-making process as a source of information for use in other areas, or as a way of testing hypotheses about the effectiveness of planning policies (logical positivism);
3. examining the decision-making process as a power struggle (political economy); and
4. examining the process as a random but related sequence of events (post-modernism).

(Gilg and Kelly 1996, p.205)

The first two approaches are statistically centred, and we will discuss these in detail in later chapter.

Simple Statistical and Cartographic Analysis

Simple statistical and cartographic analysis uses either spatial or temporal methods for analysis. Spatial method is used to compare an area with a specific policy to other area without such a policy. There are many researches in this regard. Examples are Blacksell and Gilg (1977) and Anderson (1981) who studied development control in some Areas of Outstanding Nautral Beauty (A.O.N.B.). Temporal method is used to identify the trend before and after a policy has been implemented. By comparing the decision data with the respective expected changes, the effect of the policy could be measured. An example is Curry (1992) who used development control data of a period of 25 years to evaluate development control performance in the national parks of England and Wales.

The famous debate between Brotherton and McNamara and Healey (Brotherton 1982; McNamara and Healey and Healey 1984; Brotherton 1984) questioned the robustness of the data base and the soundness of the methodology of using aggregate data for development control studies. Ian

Brotherton employed “the number of applications received per 1000 population per unit time” as a proxy to development pressure, notwithstanding the fact that the number of applications often “fail to provide an exact guide to actual development activity” (Brotherton 1982, p. 440). McNamara and Healey (1984) on the other hand, argued that the data would be too weak to reveal anything without having been sorted. They declared that “we must look at both the demands for development *and* the barriers placed in the way of the satisfaction of that demand” (McNamara and Healey 1984, p. 93) when considering the measure of development. They made the following arguments that development pressure should be measured with:

1. a clear definition of subject matter (e.g. residential development);
2. a precise measure of the expressed demand for development (e.g. dwellings applied for); and
3. a measure of the barriers placed to the satisfaction of that demand (e.g. the refusal rate of dwellings)

(McNamara and Healey 1984, p. 95)

McNamara and Healey continued to propose an equation for an index of pressure for residential development in an area:

$$P = \frac{No.\ of\ Dwellings\ Refused}{No.\ of\ Dwellings\ Approved} \times Total\ Expressed\ Demand\ for\ Dwellings$$

In the same journal, Brotherton (1984) responded to the arguments from McNamara and Healey. He defended his article in 1982 although he admitted that his method might be invalid in circumstances other than that in the extreme case of national parks. Brotherton additionally criticized the index equation proposed by McNamara and Healey for being very "odd" since "it (the index) implies that when all applications are approved, there are no pressure for development"; and that "when all applications are refused, development pressures are infinite" and that "between these nonsensical extremes, the index is given a non-linear dependency on refusal rate" (Brotherton 1984, p.98)

Gilg and Kelly (1996) pointed out that the deficiencies in development control statistics arose from the inherent flaws in the data and the difficulty in analyzing them in any mean other than a simplistic and mechanistic manner. Preece (1990) emphasized the importance of the appropriate process for data collection, hypothesis formulation and testing. He claimed that only

when the above has done can the use of development control statistics in quantitative study produce meaningful results.

Sellgren (1990) reviewed the use of development control data and identified four problematic areas:

1. Omissions;
2. Double counting;
3. Measurement methods; and
4. Comparison difficulties

(Anderson 1981; Larkham 1990a; Sellgren 1990; Watkins *et al.* 2001)

Omissions

Omissions mean that some data are missing. The available data only includes those data that planning permission is granted. Other data, like the case in which no action is taken after the permission is granted (Anderson 1981) and that developers do not submit a formal application after an informal discussion with local planning authorities (Larkham 1990b), are excluded. This deficiency cannot indicate the real pressure for development (Anderson 1981).

Double Counting

Double counting could be done by several methods. First, it is through outlining and detailed applications for one development (Larkham 1990b). Second, it is through multiple or sequential applications for the same site (Watkins *et al.* 2001). Anderson (1981) and Sellgren (1990) asserted that the use of different approaches depends on the objectives of the study. If the analysis focuses on decision-making process, all the submissions should be taken into account. If the development itself is important, only the final detailed applications should be recorded (Anderson 1981).

Measurement Methods

Gilg (1984) suggested that data should be properly weighted in the measurement process. Sellgren (1990) asserted that understanding of the initiations of the measurements and the differentiation between the size and nature of developments are important when general trends are to be derived from an analysis of total numbers of planning applications. Weighing by the size of population (Preece 1981; Brotherton 1982; Pountney and Kingsbury 1983) and by the density of applications (Anderson 1981; Buller and Hoggart 1985) have been attempted but the results is not satisfactory. Curry (1985) argued that population weights cannot normalize the volume of

planning applications for real comparisons and there is a problem for standardizing on a population base as well. Sellgren (1990) also suggested that using density alone cannot overcome the problem of giving equal consideration to each application, irrespective of the size and nature of the development.

Comparison Difficulties

In his case study of green belts, Keyes's (1986) revealed that there will be problem when comparing the development pressures and the development control decisions of some particular areas. Preece (1990) also suggested that data evaluation should be differentiated to contrast behaviours in one area with those in a controlled area. Moreover, the rate and location of applications are usually influenced by national rather than local events.

After the debate, the practice for using aggregate data in British academic research has changed. Nevertheless, the problem of measuring development pressure still subjects to further research. Home (1987) demonstrated how the trends in town planning control can be obtained by measuring decision statistics. He found that planning decision statistics could indicate the volume of proposed development activity. Home claimed that the volume of proposed development activity should be measured by the

numbers of units, land area, or floor space. However, the available development control data only allowed the four main types of development after 1979, which are major and minor, householder and change of use, to be distinguished.

Another researcher Larkham (1988) proposed the use of weighting method. In his study of townscape change, Larkham divided "fabric change" into several categories which are new building, major rebuilding, floor-space addition (extension), façade alteration, advertising signs, internal alteration, refurbishment, miscellaneous minor changes and demolition. After that, every identifiable element was counted for each application. Larkham claimed that the use of this method can improve the precision in measuring the total change to the townscape.

Sellgren (1990) conducted a comprehensive review of the use of development control data. He pointed out that in addition to the fact that development control statistics recorded both of the outline and detailed application of the same project, there might be multiple or sequential applications for the same site. He also discussed the use of weighting for development control data. In order to be homogeneous, data are needed to be weighted and it was usually done by size of population and by density of applications. Sellgren (1990) also argued the problem of size of population

as, first, “it creates the impression of high development pressure in sparsely populated areas, rather than because application levels are high” (p. 28); second, “population weight are not able to normalize the volume of planning applications for areal comparisons” (p.28). It is suggested that site area, number of dwellings could be used to standardize the data. However, the use of site area still could not take into account the intensity of the development (Sellgren 1990) as it did not consider the plot ratio of each site. Anderson (1981) and Buller and Hoggart (1985) have done some studies in density of applications.

It was surprising that researchers seldom used the proposed gross floor are to standardize the date. It may be due to the lack of required data. In Hong Kong, the problem also exists. Out of the 1992 planning applications for industrial use from 1975 to 1976 (from the unpublished data set of Lai and Fong 2000), 906 applications lacked the data on gross floor area. This significantly lowers the accuracy if the empirical equation makes use of gross floor area as a variable.

Despite the popularity of using aggregate data in research areas, its validity was still questionable. Preece (1990) argue that too much work on this area had been using the less rigorous method of “confirmation” rather than the method of “falsification”. The concept of testing by “falsification” is

that “if differentiation over time and between at least two entities does not exist, the policy under investigation is not working; if it does exist, then the policy may be having an effect though this cannot be said to be proven” (Preece 1990, p.66). He continued to propose the method of “replication” saying that this method could be pursued in planning research if the differentiation in two areas were to be examined. A four-location analogy was proposed. It was claimed that the method was able to compromise detailed studies and large scale comparative studies.

Decision-making Process as a Technical Exercise

The second approach recognized by Gilg and Kelly (1996) is in fact in the same vein of the first approach but it seeks to employ more sophisticated statistical methods to investigate the process in greater detail.

Diamond (1992) developed a method called “Adapted Balance Sheet”. He claimed that an evaluation methodology should be able to “reflect the function and character of planning” which seek “to balance competing interests in land” (Diamond 1992. p.v). The “Adapted Balance Sheet” aims to indicate the relationship between the objectives, inputs (planning instruments), Intermediate Outputs (the effect of planning decisions), final outputs (consequences of planning) and evaluation. Given a single objective,

there may be different policies which can give rise to various outputs, and the consequence of each output should be evaluated. Different policies also have different targets and the achievements should be evaluated as well. These achievements can be classified into three categories: low, medium and high. Diamond (1992) claimed that this method can comprehensively review each aspect of the consequences of planning.

Another researcher, Brotherton, developed a methodology based on the application quantity and quality in a series of articles for the analysis of development control data. (Brotherton 1992a, 1992b, 1993) Brotherton argued that

"Application quantity

= number of sites at which net benefit is positive

- Local Planning Authority (LPA) policy
- Applicant awareness"

And that

"Application quality

= applicant awareness + average net benefit ≤ LPA policy"

(Brotherton 1992a, p.340)

He further argued that

“Central Planning Authority (CPA) control

= CPA – application quality”

and that

“LPA control = LPA policy – application quality”

(Brotherton 1992b, p.466)

He made a conclusion that appeals as a proportion of all applications were the difference between LPA and CPA policy.

It seems that the above equations are easy to understand, its validity is questionable. Firstly, it is in doubt that whether the ambiguous terms “quality” or “policy” can be put into a quantitative equation. Secondly, in order for the above equations to be valid, there is an implicit assumption that the relationship is linear and that the coefficients of all terms are all in unity.

Decision-Making Process as a Political Struggle

It is argued that statistically centred approaches could only give broad trends and they ignored "the struggle between different groups for supremacy in decision making" (Gilg and Kelly 1996, p. 207). In regard to the above criticism, a new approach has been developed in the 1980s which focuses on the power struggle between different interest groups involving in the decision-making processes.

Harrison claimed that "looking at organizations and the mechanisms of decision-making might also have value as an academic approach to the city and region" (p.254). Indeed,

> "[t]he local decision-making process takes place within a context of legal and administrative constraints which may considerably limit the choices of chief officers and representatives. The freedom that remains to local authorities is exercised in accordance with the motives of officers, representatives and interest groups and the balance of power in any particular local situation."
>
> (Harrision 1972, p.254)

Harrison set out to examine the key constraints which had "shaped the environment for decision-making in relation to development control" (Harrison 1972, p.254)

After the work of Harrison, there were many researches surrounding the issue of power struggle among the decision-makers. Buller and Hoggart (1985) empirically tested the assumption that residential development control process in rural areas reflected power relationships in society. They adopted an innovative non-decision framework of analysis. Non-decision making means, as the authors put it simply, "if B decides not to act in a certain way due to a belief that A would disapprove, resist or even veto the proposed action, then A has power over B, even though neither of them acted" (Buller and Hoggart 1985, p. 140)

Following Buller and Hoggart (1985), Preece(1990) argue that there is no reason not to combine power struggle aspect with the traditional empirical approach. An excellent example in this view is the work of Buller and Hoggart.

Tewdwr-Jones (19950 further demonstrated the ethical dilemmas facing the planners and politician, in addition to the analysis of the

behavioral element to main decision makers in the development control process.

Random but Related Sequence of Events

This approach was sometime called "post-modern" view. Tewdwr-Jones argued that analysis of behavioral element to decision making could "provide an opportunity to assess how local planning authorities operate the system in practice" (Tewdwr-Jones 1995, p.163). Tewdwr-Jones also indicated that there were few researches which had been done to discuss the complexities surrounding the implementation of planning policies by local government officers and councilors in Britain.

Nevertheless, Gilg and Kelly (1996, p.209) argued that such analysis had already been done under the humanistic, behavioral, qualitative and case study umbrellas." They further indicated that many of these analyses had been conducted in North America, and Milroy (1991) had made a comprehensive research in this regard in the United States.

Larkham (1990a) pointed out that the approach could not be used without considering any aggregate data. Indeed, as Gilg and Kelly (1996) argued, the four methodologies described above were not mutually exclusive.

A combination of two or more approaches was possible. Aggregate data could be used first to give a general trend and this can be used as the basic information for case study selection. In the case studies, power struggle and behavioral elements can be considered.

The Interpretation of Development Control Data

A number of researches have been done for the interpretation of development control data. Home (1987) argued that "a high refusal rate may not mean that the policies are bad, rather that the demand for and profitability of certain types of development maintains a high level of applications" (p.54) and that "a high refusal: appeal ratio will suggest a tendency to submit to the local authority's decision, and a low ratio a determination to get the decision overturned" (p.55).

In a recent research, Wood (2000) argued that "despite some caveats appeal data may be a useful measure of both development pressure and policy style" (p.98) and that such "apparently objective measures can be sued in the process of case-study selection" (p.98) and weighed "their chances of success against the cost of an appeal" (p.99), then "the appeal rate can arguably be sued as an indicator of development pressure" (p.99). Wood interpreted the negative correlation between the application approval rate and

the appeal rate as the authority's "negotiating style". It meant that the harder the style of authority, the higher the appeal rate.

Monitoring the "efficiency" of LPA for the Implementation of Policy

Larkham (1990a) claimed that planning system was largely discretionary, that planning decisions might not always be related to stated policies, and that policy was evolutionary, "changing over time in response to change in numbers or types of applications" (p.3). Moreover, "LPAs varies considerably in the resources allocated to development control, in the details of procedure for assessing applications, and indeed in the number, type and nature of policies in force" (p.3). Therefore, Larkham (1990a) drew the conclusion that "any direct inter-authority comparison on the basis of development control statistics alone is patently nonsense" (Larkham 1990a, p.3).

Larkham (1990b) further verified four assumptions implied in assessing the level of implementation of any given policy from development control data:

1. All development pressure, however slight, must enter the formal planning process as planning applications;
2. All pressures for development occur irrespective of the content of the policy (i.e. policy and planning application are mutually independent);
3. All decisions made are based solely upon the policies stated, and
4. All policies have single, simple and clearly identifiable and expressed aims.

(Larkham 1990b, p.173)

The assumptions were quite difficult to defend for various reasons (McNamara and Healey 1994, pp. 95-96)

The Use of Disaggregate Data

Willis (1995a) constructed the "cognitive continuum" and "lens" model to derive a framework for describing how people made development control decisions. This model is used to "predict the outcomes of the underlying decision process without claiming to emulate the sequence and manner in which information is processed by the decision-maker" (Willis 1995a, pp.1077-78).

Willis claimed that professionals (including planners) typically made intuitive judgements which involved "unconscious, often rapid, data processing" that combined "the available information by averaging it" (Willis 1995a, p.1070). Owing to the limited information processing capability, this bounded rationality justified the use of some system-aided judgement methods, e.g. linear programming, discounted cash flow, decision trees, regression analysis, discrete choice models, etc (Willis 1995a).

The "lens" model assumes that "there is some actual, underlying, hidden condition or state – planning permission – which the planning officer (or planning committee) is trying to identify and classify, from observable signs, cues or indicators it produces" (Willis 1995a, p.1071). "A proposed development is thought of as emitting signals, differing in character,

frequency, and strength. The decision-maker will utilize these clues and work back together to arrive at the decision whether to grant planning permission or not" (Willis 1995b, p.99). Thus, the decision theorists need to find out "the relative weight the decision maker assigns to each of the cues, the functional form of each cue in relation to the judgement, the principle by which the data from the cues are organized, and the consistency with which the judgement is exercised" (Willis 1995a, p.1072).

Willis (1995a) used a logit function which is a discrete choice model to study probabilities for granting a planning application. In the same period, he studied the planning decision on waste disposal site by using the same model (Willis 1995b).

Willis further asserted that the logic function could help decision making within the planning framework "to the extent of making the actors involved in the process more aware of how they reach [ed] a decision, and the weights they attach[ed] to the different factors involved in refusing or granting planning permission" (Willis 1995a, p.1078).

In Hong Kong, Tang and Tang (1999) used the logit model to evaluate the effectiveness of land use planning incentive for private redevelopment in the so-called "two-tier plot ratio" system. In their study, the logic function

was used to test whether site area affected the chance of planning approval and they used 627 observations in the years 1987 to 1997 obtained from the Planning Department to do the test. The result was that site area did affect the chance of obtaining planning approvals.

Tang and Choy (2000) also used the logit model to find out the decision making criteria in development control process and to examine the extent to which these criteria were covered under some formally written planning policies. They considered all the criteria defined by the Hong Kong Planning Standards and Guidelines (HKPSG) and other site-specific and market variables. Elimination of insignificant factors based on the concept of "falsification" by Preece (1990) was also done.

Tang *et. al*. (2000) investigated the planning applications for office use on Hong Kong Island using the logit model to verify the certainty and discretion in planning control in Hong Kong. They used 104 observations for the years 1988 to 1997 in the study and they found that planning system in Hong Kong offered "both certainty to developers and flexibility to the planning authority" (Tang *et. al*. 2000, p.2481).

The Discrete Choice Model – The Probit Model[28]

A probability function can be divided into three types: (1) the linear probability (LP)model; (2) the probit model; and (3) the logit model. These models are known as qualitative response, quantal, categorical, or discrete models (Amemiya 1981). They are used whenever the dependent variable is a probability whose value is restricted to from 0 to 1.

Amemiya (1981) only gave a comprehensive response model while Aldrich (1984), in his book, titled "*Linear Probability, logit, and probit models*", gave a simple but detailed mathematical deduction for each of the models.

The Probit model was originally used in the 1930's to investigate the impact of insecticides on insects. The assumption in the study was that an insect will die if the doses of the insecticides exceed a critical limit. The critical limit was different for different insect and it is determined by a number of factors. If p is the proportion of insects killed, the probit transformation $y=F^{-1}(p)$ is applied and y can be expressed linearly in terms of the dosage of the drug (Theil 1971).

[28] See Lai and Ho (2001a)

In addition to biological experiment, the probit model was also widely used in urban economics including model homeownership (Lee and Trost 1978; Goodman 1988; Horioka 1988; Bourassa 1995; Hsueh and Chen 1999; Painter 2000), ownership of automobiles (Farrell 1954) and residential construction (Chan 1999). Nowadays, the probit model has also been applied in studying development control (Lai and Ho 2001a, 2001b, 2001c, 2001d, 2002a, 2002b, 2002c, 2003; Yung 2001; Chiu 2002; Kwan 2002; Ngai 2002; Wan 2003; Kwong 2005; Ip 2005; Lam 2005) and property in Hong Kong (Lai and Chan 2004).

Application of Probit Model to Development Control Analysis

Lai and Ho (2001a, 2001c, 2002a) have done many researches in examining the rent-seeking behaviour of the planning authorities in Hong Kong by the use of the probit model. In the studies, no statistical evidence can be found to support the view that the TPB favoured larger developers in applying for change in use in Green Belt Zones, Residential (B) and Residential (C) Zones and Open Storage Zones. Interestingly, Lai and Ho (2001b, 2001c, 2002c) found that smaller development like applications for small house in Green Belt Zones and Unspecified Use Zones (Lai and Ho 2001b) and in Residential (A) Zones (Lai and Ho 2001c) and

Government/Institution/Community Zones (Lai and Ho 2002c) have a greater chance of success. However, a necessary condition for rent-seeking is found to exist in Comprehensive Development Area (CDA) Zones by Lai and Ho (2002c, 2003).

Lai and Ho (2001b, 2001c, 2002c) also examined the effect of exogenous government policies on decision making of the planning authorities in Hong Kong. Lai and Ho (2001c) confirmed that government policies exerted certain effect on decision made in change in use in Residential (B) and Residential (C) Zones but they rejected the argument in Residential (A) Zones (Lai and Ho 2001c), small house applications in Green Belt Zones (Lai and Ho 2001b), Comprehensive Development Area Zones, Government/ Community/ Institution Zones and Green Belt Zones (Lai and Ho 2002c).

In regard to the change in use in Green Belt Zone, Lai and Ho(2001a) found that it is easier to get planning approval for small houses than that for ordinary house development. In addition, Lai and Ho (2002a) verified that there was statistical grounds to support the view that the planning permission mechanism in Hong Kong is market neutral towards the container industry but the probabilities for granting planning approval in mixed industrial/office

and pure office uses in Industrial Zones are dependent upon the rise and fall of the manufacturing sector (Lai and Ho 2002b).

CHAPTER 5

HYPOTHESIS AND METHODOLOGY

Hypothesis

The *Town Planning Ordinance* has the following aims:

> [t]o promote the health, safety, convenience and general welfare of the community by making provision for the systematic preparation and approval of plans for the layout of areas of Hong Kong as well as for the types of building suitable for erection therein and for the preparation and approval of plans for area within which permission is required for development

(Town Planning Ordinance, Cap 131, preamble)

In Hong Kong, the statutory planning is considerably "a matter of the exercise of discretionary power while there are few substantial or procedural rules that help applying such power" (Lai 1999, p.18). In order to clarify the criteria for planning permission, the Town Planning Board has issued guidelines to reveal the planning intentions.

With regard to the structural change of economy in Hong Kong, the Town Planning Board has issued new guidelines for industrial zone. The related set of guidelines is Town Planning Board Guidelines for Use/Development within "Industrial" Zone (TPB PG-No.25B). In the guidelines, "[t]he Town Planning Board (the Board) recognizes that with the structural changes in the industrial sector, industrial activities in Hong Kong are shifting from manufacturing and production-oriented to more diverse management/service-oriented and information-based" and it also identifies "the rapid development of information technology (IT) and telecommunications industries." In response to economic change, "Other Specified Uses (Business)" zone[29] has been introduced so as to "allow maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings, as well as in the development of new buildings for both commercial and clean industrial uses." The guidelines also aim to provide adequate space for the IT industry. (TPB PG-No. 25B, pp. 1-2)

In addition, the Board also identifies the importance of the supporting industrial-related non-manufacturing activities due to the migration of manufacturing industries to the Mainland. In this sense, the Board "relax[es] the control on offices relating to industrial uses and trading firms which require large storage space and frequent loading/unloading." The above uses

[29] See Appendix II

are also permitted as of right in the “I” zone. However, general commercial and office uses are still subject to normal planning control in “I” zone. (TPB PG-No. 25B, pp. 1-2)

The Board has issued many planning guidelines aiding planning applications. Nevertheless, they are not statutory in nature and the Board is not abided by the conditions laid out in the guidelines. Therefore, the success of planning application still remains in the “discretionary power” of the Board (Lai 1999, p.18). This “hybrid” planning system (Booth 1996) is claimed to provide both certainty and flexibility in the development control process by government planners (Planning Environment and Lands Branch 1996). However, the discretionary permission process confers ambiguity to applicants when applying for planning permissions. It is the aim of this dissertation to find out the criteria for successful planning application. Factors like development scales, location, uses applied for and exogenous policy will be considered in this dissertation.

By collecting planning application statistics from the Planning Department, it is possible to evaluate the behaviour of the Town Planning Board and find out the decision making criteria for planning applications. Six refutable hypotheses concerning development proposals in Industrial zones are set up to monitor the decision making process of the Board.

1. Planning applications in larger sites (measured in terms of the proposed Gross Floor Area (GFA) of the building) have no greater chance of being approved by the TPB than that in smaller sites. (Hypothesis I)

2. Planning applications of proposed development in Industrial zone in one particular region have no greater chance of being approved in all other regions. (Hypothesis II)

3. Planning applications for a particular proposed use in Industrial zone have no greater chance of being approved by the TPB than other uses in Industrial zone. (Hypothesis III)

4. Planning applications in S.16 applications has no greater chance of being approved by the TPB than that in other stage of planning application. (Hypothesis IV)

5. Planning applications for proposed development in Industrial zone after January 2001 have no greater chance of being approved by the TPB than that before January 2001. (Hypothesis V)

6. The probability of getting approval for a planning application is not affected by market condition. (Hypothesis VI)

Hypothesis I tests whether there is any rent-seeking behaviour exists in the decision making process of the TPB. It is claimed that there is an inherent bias of the TPB towards larger developers in the fact that larger GFA involves more capital and is therefore a proxy for the involvement of larger developers who should be more resourceful in lobbying with the planning authorities than smaller developers. (Lai and Ho 2001a, 2001b, 2001c, 2002a, 2002c, 2003).

Hypothesis II tests whether there is any bias of the TPB in granting planning permission in different regions, namely, Hong Kong Island, Kowloon, Development Permission Areas, New Towns and Rural areas. There are two planning committees in Hong Kong and both of them are set up under the *Town Planning Ordinance*. They are the Metro Planning Committee (MPC) and the Rural and New Town Planning Committee (RNTPC). The jurisdiction of the former committee covers Hong Kong Island and Kowloon while the later committee covers New Towns and rural areas. Town centres of Tsuen Wan, Kwai Chung and Tsing Yi are all classified into the group of New Towns. The surrounding villages are classified into the group of rural area. Development Permission Areas are

those areas with either Interim Development Permission Area (IDPA) Plan or Development Permission Area (DPA) Plan. All other four types of areas are covered by Outline Zoning Plan (OZP). Since the planning enforcement and the process for change in use in sites covered by IDPA or DPA plans are different to that covered by OZP, DPA is distinguished from the other four types of areas.

Hypothesis III tests whether there is any bias for the TPB in granting planning permissions for certain uses in Industrial zone. The uses under test include commercial, office, residential, industrial/office building, offensive industrial use, local provision store, hardware shop and restaurant as they are the usual applied use in Industrial zone.

Hypothesis IV tests whether there is any effect in the stage of planning application contributing to the success in obtaining planning approval. There are three stages of application which include S.16 planning application, S. 17(1) planning review and S. 17(B) planning appeal.

Hypothesis V tests whether there is any difference for the TPB to grant planning permission before and after January 2001. The date is chosen because there was a new policy relating to a relaxed control in Industrial zone.

Hypothesis VI tests whether the success of obtaining planning approvals is responsive to a change in the overall market situation. The vacancy rate in private flatted factories is used as a proxy for market situation.

Interpretation of Hypothesis

If Hypothesis I is refuted, the probability of successful applications for larger development would be higher than that of smaller ones. We can conclude that there is rent-seeking behaviour of the TPB in favour of larger developers who are more powerful in negotiating with the Board.

If Hypothesis II is refuted, there are grounds that the Town Planning Board would take into account the location of the sites when making a decision on planning approval. The result may also show the preference of the Board towards certain areas.

If Hypothesis III is rejected, we can conclude that the Town Planning Board would consider the proposed use when granting planning permission. The result would also show the preference for the Board towards certain uses.

If Hypothesis IV is refuted, we can say that the stages in planning application contribute to the success of getting planning approval. The probability of getting planning approval in one particular stage is different from that in other stage of application.

If Hypothesis I, II, III and IV are not rejected altogether, then we can conclude that the decisions of the Town Planning Board are based on its professional judgement and it would consider each development proposals based on its individual merits on a case-by-case basis applying relevant internal planning policies and standards.

If Hypothesis V is rejected, we have grounds to say that the probability for successful planning application would be higher if applying after January 2001. We can conclude that the decision of the Town Planning Board adhere to its published guidelines (TPB PG No 22B and No.25B) in relaxing the control of planning permission in Industrial zone. Moreover, it can be shown that the Board is responsive to the economic conditions of Hong Kong in enacting relevant policies and in granting planning permissions.

If Hypothesis VI is refuted, there is evidence that the Town Planning Board would take into account the general market conditions when considering the grant of planning approval for planning application.

If both Hypothesis V and VI are rejected, then we can conclude that the Town Planning Board would consider the economic situation in the decision making process of granting planning permission.

Model Specification[30]

We would like to find the relationship between (a) the probability of a planning application being approved and (b) the characteristic of the particular application as well as other material considerations which the Town Planning Board may consider in deciding whether an application is to be approved or not. Linear Probability Model, Probit Model and Logit Model can be used for the above investigation. However, as the dependant variables used in this linear regression model range from positive infinite to negative infinite, it is not suitable for using this method in this dissertation as the variables used have value of either 1 or 0. Moreover, Ameniya (1981) claimed that the result of linear regression model is not favourable. Therefore, liner regression model is not used. The results for the probit and

[30] This part is adapted from Yung (2001).

logit model are more or less the same except in extreme values of X_j (Amemiya 1981; Aldrich 1984). Therefore, the probit model is used in this dissertation.

Linear Probability Model

It is tempting to specify a linear probability model due to its simplicity (Aldrich 1984). Therefore, the following linear model is suggested:

$$Y_i = b_0 + b_1X_{i1} + b_2X_{i2} + \ldots + b_kX_{ik} + e_i = \sum^{k}_{j=0} b_j X_{ij} + e_i \qquad [2.1]$$

where Y is the dependent variable, X_k (k= 1, 2, …, K) are the independent variables, b_k (k=1, 2, …, K) are the parameters, e is the random error, the subscript i denotes the i^{th} observation from the sample of size N. In this case, the dependent variable Y denotes the probability of being approved in a planning application. The value should be constrained to be from 0 to 1 since it is a probability.

However, the right hand side of equation [2.1] is not constrained so much, and its value ranges from negative infinity to positive infinity. Although we can define Y=1, if ($\sum b_jX_j + e$) > 0; and Y=0 if ($\sum b_jX_j + e$) < 0,

the result is still not favourable (Ameniya 1981, p.1486). Thus, the linear regression model is not suitable for use in this dissertation.

Probit Model

Suppose there is an unobserved variable y* which ranges from -∞ to +∞. This y* is assumed to be linearly related to the observed independent variables X's by,

[3.1] $y^* = \sum b_j X_j + e$

y* is therefore linked to the observed binary variable y (the outcome) by the following equation:

[3.2] $$y = \begin{cases} 1 & if \quad y^* > 0 \\ 0 & if \quad y^* \leq 0 \end{cases}$$

Thus, Pr(y=1) = Pr(y*>0), and Pr(y=0) = Pr(y*≤0) = 1 – Pr(y=1). As y* is continuous, the problems of specifying a linear probability model are avoided. We assume that the expected value of the error term is 0, i.e., $E(e \mid X)=0$. Since y* is not observable, the variance of the error term e, i.e.,

Var(e | X), cannot be estimated. We need to assume the distribution of the error term. As "the probability of an event is unaffected by the identifying assumption regarding Var(e | X)" (Long 1997, p.50), we assume the error term e would follow a normal distribution with mean 0 and variance 1. The cumulative distribution function of a normal distribution with E(e | X)=0 and Var(e | X)=1 is:

[3.3] $$\Phi(e) = \int_{-\infty}^{e} \frac{1}{\sqrt{2\pi}} \exp(-\frac{t^2}{2}) dt$$

Pr(y=1) = Pr(y* > 0) = Pr ($\sum b_j X_j$ + e>0) = Pr (e> -$\sum b_j X_{j)}$. Therefore, the cumulative normal distribution is symmetrical,

Pr(e> - $\sum b_j X_{j)}$ = Pr (e< $\sum b_j X_j$). Thus,

Pr (y=1)

= Pr(e< $\sum b_j X_j$)= Φ ($\sum b_j X_j$)

$$= \int_{-\infty}^{\sum bjXj} \frac{1}{\sqrt{2\pi}} \exp(-\frac{t^2}{2}) dt \qquad [3.4]$$

Maximum Likelihood Method

As y* is unobservable, Ordinary Least Squares (OLS) method is not application to estimate the parameter b_j. Therefore, the Maximum Likelihood method is used.

As there are only 2 possible outcomes: either approval (y=1) or rejection (y=0), and as all the planning applications are independent of each other, we can apply the binomial distribution to find the likelihood of happening of a particular event:

$$[3.5] \quad L(b_j) = \prod_{y=1} \Pr(y_i = 1) \prod_{y=0} [1 - \Pr(y_i = 1)]$$

where i denotes the i^{th} application. We may also get the Log Likelihood equation by taking logs on both side of equation [3.5].

In this dissertation, the probability of a successful planning application is modeled as a function of the proposed gross floor area (GFA), the specific applied use, location, time and stage of application. Let $X\alpha_1$, $X\alpha_2$, $X\alpha_3$, $X\alpha_4$ and $X\alpha_5$ be the values taken by these variables for the α^{th} planning application.

To estimate the parameters $b_{j,}$ we need to use the Maximum Likelihood method. The observation are arranged in such a way that the first n' applications are approved by the Town Planning Board, and the n-n' applications are rejected. The logarithmic likelihood function can be written as

$$\sum \log p(X\alpha_1, X\alpha_{2,} X\alpha_{3,} X\alpha_{4,} X\alpha_5) + \log [1- \sum p(X\alpha_1, X\alpha_{2,} X\alpha_{3,} X\alpha_{4,} X\alpha_5)] \quad [3.6]$$

(Lai and Ho 2001c)

Since we can never find out the exact values of b_j and so the Maximum Likelihood method is used to find the set of values of b_j which can maximize the probability of a particular observation.

Since it can be shown that the Log Likelihood equation is globally concave, i.e., there will be only 1 maximum, we can use the iterative procedure to converge our estimations to the single maximum (Amemiya 1981). This iteration method starts with an initial value. Attempts are then made to improve on the guess by adding a vector of adjustments. The process ends until there is convergence (Long 1997).

Logit Model

In equation [3.3], if e follows logistic distribution, then we will obtain the following logit model:

[3.7] $$\Pr(y = 1) = \frac{e^{\sum b_i X_i}}{1 + e^{\sum b_i X_i}}$$

It can be shown that the result from using the probit and the logit model are more or less the same except in extreme values of Xj (Amemiya 1981; Aldrich 1984).

The above statistical models can be applied by using suitable computer program, like the EView, SAS and SPSS. In this dissertation, EView would be used for the statistic estimations.

Data Description

Data used in this dissertation were obtained manually from the Planning Department in the period from 1979 to 2005[31]. The data covers all the planning applications in the Industrial and Industrial (Group D) zones. There are altogether 1991 applications in the period. Owing to the enactment of the *Data (Privacy) Ordinance*[32], the details about the individual developers or consultants are no long published by the Planning Department for public inspection. The disclosed data include:

1. File reference (the file reference number that was assigned by the Town Planning Board Secretariat)
2. Planning area (the planning area that was designated by the Town Planning Board for preparation of statutory town plans)
3. Outline Zoning Plan/ Interim Development Permission Area/ Development Permission Area Plan number (the number that appeared on the relevant statutory town plan)
4. Lot number (the lot number registered in the planning application form)

[31] The data of planning applications from 1975 to 2004 are collected by Professor Lai, Yung Ping, Thomas Wan, Veronica Lin and Valerius Kwong.

[32] Cap. 486, Laws of Hong Kong

5. Address (the address of the site for which a planning application was lodged by an applicant)
6. Application date (the date at which the planning application was received by the Town Planning Board Secretariat)
7. Status (the stage of a planning application, viz. s. 16, s. 17(1) and s. 17B applications)
8. Meeting date (the date of the Town Planning Board meeting to decide en application)
9. Decisions (the decision of the Town Planning Board: rejection, approval without planning conditions or approval with conditions)
10. Zoning (the type of zone specified in the relevant statutory town plan)
11. Applied use (the relevant Column 2 use or use under the cover pages of the notes to the statutory plan)
12. Site area (the gross floor area of the applicant's site)
13. Existing gross floor area (the gross floor area of the building that existed on the applicant's site at the date of the application)
14. Gross floor area under application (the gross floor area of the building proposed to be developed on the applicant's site if approval was granted or the area of the part of a premises[33] for which a change in use was applied)

[33] It is not known whether the "area of the premises" refers to GFA or "saleable area".

15. Previous reference/ further reference (the file reference number that was assigned to a previous application.)

(Lai and Fong 2000)

Dependent Variable---- Decision (DEC)

The dependant variable is the decision made by the Town Planning board when planning applications are received. In the data obtained from the Planning Department, the decisions are divided into five categories, namely, approved (A), approved with conditions (AC), approved temporarily (AX), delayed (D) and rejected (R). As DEC is a dummy model in our model, DEC equals 1 if the application is approved be it with or without conditions or temporarily, and it is equal to 0 if the application is rejected. In case, the application is delayed or withdrawn, the application is excluded from the data set as no decision was made in this regard.

In addition, there is no distinction drawn between the decisions made among different stages of application. Therefore, if the decisions are made in s.16, s.17(1) review[34], s.17B appeals[35] or EOT[36] application, the dependent

[34] s.17(1) refers to planning review after the failure of obtaining planning application.

[35] s. 17(B) refers to planning appeal after the failure of planning review

[36] EOT refers to extension of time which involves application for a long time for the applicant

variables are all equal to 1. Moreover, only the decision made in the final stage of the application process are considered. For example, if an s.16 application was rejected by the TPB but an approval is obtained from the subsequent planning review, only the decision made in the review would be taken into account in our statistical model.

Independent Variables

Site Area

Site Area (in square metres) is defined as the area of land under application. If there is more than one piece of land in application, the site area is the total area of each piece of land under the same application. Some data collected from the Planning Department are in acres or hectares. In this case, the measurements will be adjusted manually to metric scale[37]. Any set of data which does not contain both site area and gross floor area will be excluded from our model.

In the empirical work of Tang and Choy (2000), it showed that site area was not a significant factor for decision in planning applications for office use in urban Kowloon. However, due to the difference in type of use,

[37] From the information obtained from the web site: http://www.hracr.com.tw.

data size and study period, whether site area is a crucial material consideration in all zones needs further investigation. Here, we shall study Industrial zone.

Table. 5.1 Site area distribution for applications for uses in Industrial

Site Area	Approvals	Total	Success Rate (%)
Small than 0.1 ha	208	287	72.47%
0.1 ha to 1 ha	544	733	74.22%
Larger than 1 ha	53	65	81.54%
N/A	715	906	78.92%
Total	1520	1991	76.34%

Gross Floor Area (GFA)

GFA is the proposed gross floor area (in square metres) of a site undergoing planning applications. In case of missing information, the GFA would be assumed to be equal to site area if the application does not involve any building (like the case in petrol-filling stations, open storage and cargo handling sites). If both of the site area and the GFA are missing or if the application involves other uses, the data with missing GFA would be discarded.

Owing to the lack of available information about the scale of final development in planning application stage, the proposed GFA will be used as a proxy for the scale of the final development as adopted in many

previous researches (Tang and Choy 2000; Tang *et. al.* 2000; Lai and Ho 2001a, 2001b, 2001c, 2002b, 2002c, 2003).

Tang and Choy (2000) revealed that GFA representing the scale of development was not significant in the probability of getting planning permission. Moreover, Lai and Ho (2001a) claimed that ln(GFA) was an significant variable in determining planning permission for "small house" in Green Belt (GB) and Unspecified Use (U) zones. In contrast, Tang *et. al.* (2000) showed that GFA was insignificant at 5% level (significance = 0.092).

Table. 5.2. Gross floor area distribution for applications for uses in Industrial Zones

GFA	Approvals	Total	Success Rate (%)
Smaller than 5000 m2	968	1259	76.89%
5000 m2 to 50000 m2	379	500	75.80%
Larger than 50000 m2	75	103	72.82%
N/A	98	129	75.97%
Total	1520	1991	76.34%

Location Dummies (HK, KW, NT, DPA, RURAL)

The location dummies are about the location of the planning applications concerned. Out of the 1991 applications, 300 are on Hong Kong Island, 950 are in Kowloon, 729 are in New Towns, 0 are Development Permission Area and 12 are rural area (Fig. 5.1.). These dummies are set to

find out whether the TPB has any preference for granting planning permission in certain location.

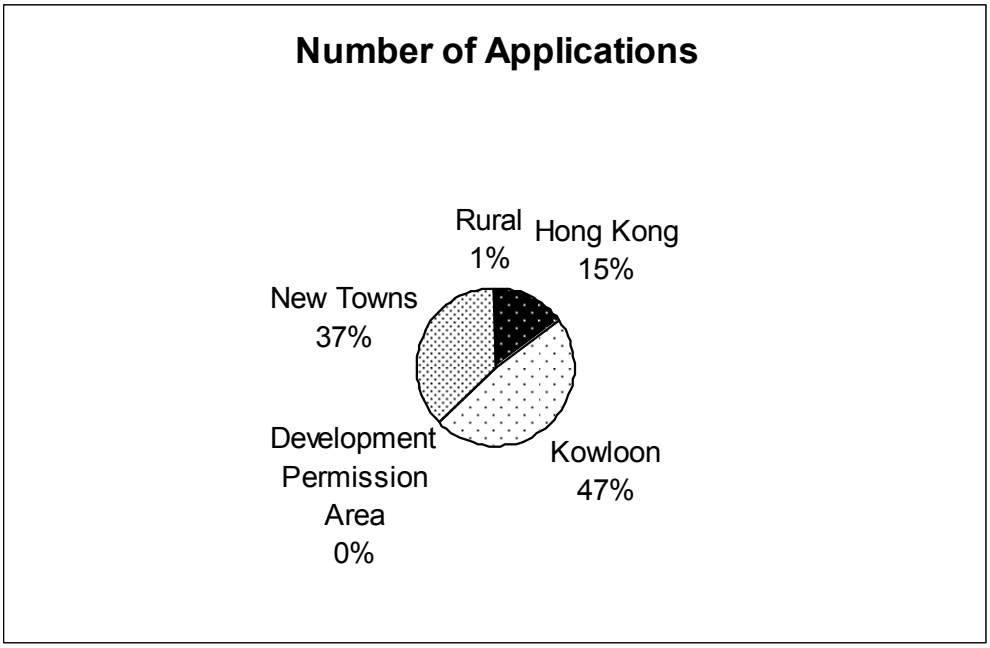

Fig. 5.1 Locations of distribution of 1991 planning applications for uses in Industrial Zones from 1975 to 2005

The three location dummies are indicated as below:

1. *HK is equal to 1 if the proposed development is located on Hong Kong Island and is equal to 0 if otherwise*

2. *KW is equal to1 if the proposed development is located in Kowloon and is equal to 0 if otherwise*

3. *NT is equal to 1 if the proposed development is located in New Towns and is equal to 0 if otherwise*

Use Dummies (D_COM, D_OFF, D_RES, D_IO, D_OFFENSIVE, D_LPS, D_HWSHOP, D_REST)

The use dummies are about the types of use applied for in planning applications. Out of the 1991 observations, there are 783 observations for commercial use, 674 observations for office use, 39 observations for residential use, 317 observations for industrial/office use, 42 observations for offensive industry use, 78 observations for local provision store use, 53 observations for hardware shop use and 119 observations for restaurant use. The remaining observations belong to "other uses"(Fig 5.2.). The uses chosen reflect the actual demand for use in Industrial zone. Most of them are office or commercial related uses as they can reflect the intention of the Board in trying to reshape the industrial area so as to cater for the structural economic change in Hong Kong. Note that there can be more than one applied uses in one single application.

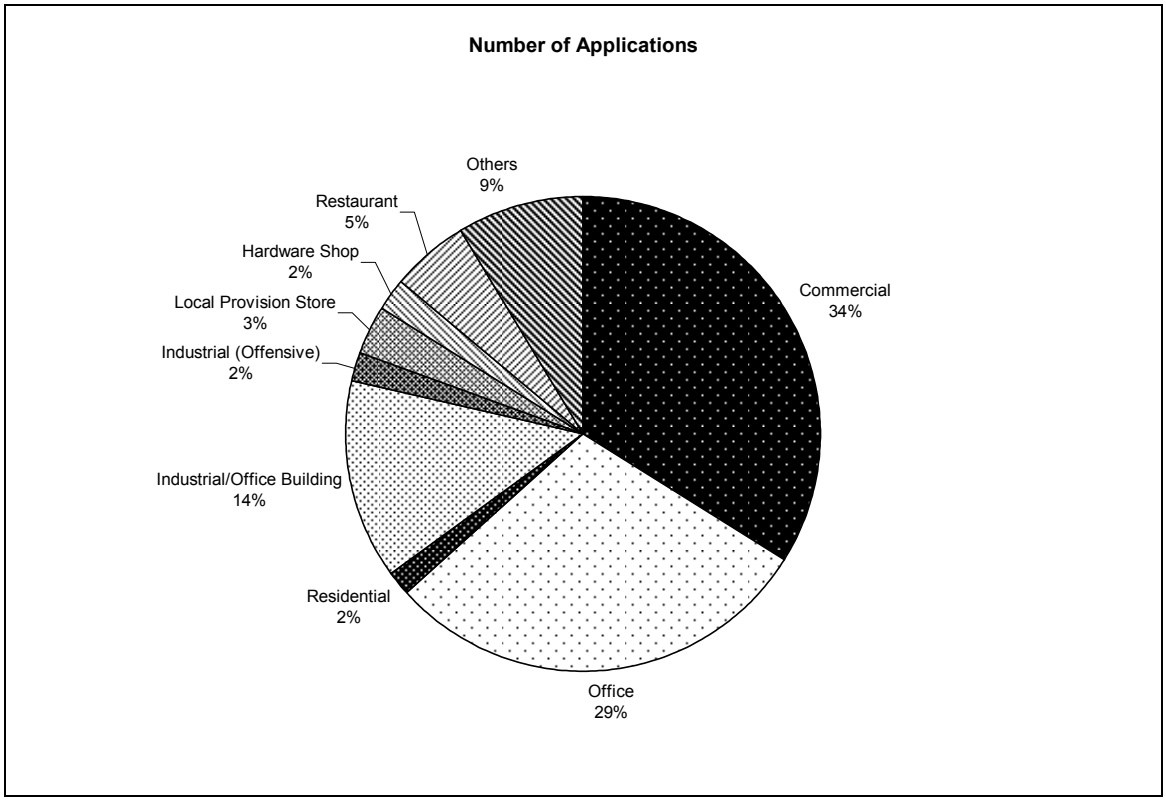

Fig. 5.2. Use distribution of 1991 planning applications for uses in Industrial Zones from 1975 to 2005

The eight use dummies are listed as follows,

1. *D_COM is equal to1 if the application applied for is commercial use and is equal to 0 if otherwise.*

2. *D_OFF is equal to 1 if the application applied for is office use and is equal to 0 if otherwise.*

3. *D_RES is equal to 1 if the application applied for is residential use and is equal to 0 if otherwise.*

4. *D_IO is equal to1 if the application applied for is industrial or office use and is equal to 0 if otherwise.*

5. *D_OFFENSIVE is equal to 1 if the application applied for is offensive industrial use and is equal to 0 if otherwise.*

6. *D_LPS is equal to 1 if the application applied for is local provision store use and is equal to 0 if otherwise.*

7. *D_HWSHOP is equal to 1 if the application applied for is hardware shop use and is equal to 0 if otherwise.*

8. *D_REST is equal to 1 if the application applied for is restaurant use and is equal to 0 if otherwise.*

Time Dummy (AF01)

The time Dummy is used to distinguish between planning applications made before and after January 2001. In 2001, the Town Planning Board replaced certain industrial-related guidelines (TPB PG-No. 1A, 3A, 4A and 7A) and published a new set of guidelines (TPB PG- No.25B) which clearly specified "the need to support industrial-related non-manufacturing

activities" and "relaxation of control on offices related to Industrial uses and trading firms". In the same year, the Board published a set of guidelines (TPB PG-No.22B) for the establishment of a new zone--- the "OU (Business)"[38]zone. In this zone, "maximum flexibility in using the industrial or industrial-office buildings" was allowed. After the issue of the sets of guidelines, the Board should relax its control on change in use in Industrial zone. The time dummy is set up to model the behaviour of the Board in whether it has actually relaxed its control on granting planning permission in Industrial zone and so as the chance of obtaining planning permission after the issue of the guidelines.

The time dummy is indicated as follows,

AF01 is equal to 1 if the application was decided in or after January 2001 and is equal to 0 if otherwise.

Application Stage Dummy (s16)

Application Stage Dummy is a dummy that recognizes the different stages of planning applications. To apply for a change in use of a piece of land, the applicant must first file an application under s.16 of the *Town*

[38] OU(Business) zone is a sub-zone of Other Specified Uses (OU) zone

Planning Ordinance. If the applicant fails in the above process, he can apply for a review under s. 17(1) of the *Town Planning Ordinance* (TPO). If he still fails in the review, he can continue to apply for an appeal under s. 17B of the TPO. In our study, there are 1982 s.16 applications, 173 s. 17(1) reviews, 12 appeals and 41 Extension of Time (EOT). Wan (2003) believed that there are some unknown factors which distinguish s.16 applications from other stages of applications and he believed that it is these factors which result in a higher success rate for s.16 applications. The application stage dummy is indicated as follows,

> *S16 is equal to 1 if there is no s.17(1) review, s.17(B) appeal following the decision made under s.16 application and is equal to 0 if otherwise.*

Vacancy Rate (VACANCY)

Vacancy Rate from 1975 to 2004 is obtained from the Hong Kong Property Review published by the Rating and Valuation Department. The vacancy rate is calculated by dividing the total amount of vacant area by the total floor space in private flatted factories in Hong Kong. Vacancy represents the amount of the unit that was not physically occupied during the time of survey at the end of the year. In the technical notes of the Hong Kong Property Review 2005, “Premises under decoration are classified as

vacant. Some vacancies could be due to units not yet issued with the Certificate of Compliance or Consent to Assign, which therefore could not have been occupied." The data covers the entire stock and is not confined to new developments.

Vacancy rate is used as a proxy to indicate the position of industrial land use in the general market as it represents the amount vacant with respect to the total stock of land. It can thus directly reflect the demand for industrial units in Hong Kong. The higher the vacancy rate in private flatted factories, the lower is the demand for industrial land use.

Table 5.3. Private flatted factories-overall vacancy trends for years 1975 to 2004

	In Buildings Completed during the Year		
Year	Total Floor Space	Amount Vacant	%Vacant
1975	206100	N/A	N/A
1976	266700	N/A	N/A
1977	826100	303800	79.1
1978	1091500	399200	84.4
1979	1277700	499900	86
1980	976700	375600	38.5
1981	1121500	603800	53.8
1982	1041100	707300	67.9
1983	620900	413400	66.6
1984	429400	181600	42.3
1985	456100	333000	73
1986	610500	277400	45.4
1987	540600	186400	34.5
1988	1105300	583900	52.8
1989	864200	455400	52.7
1990	585500	282100	48.2
1991	520700	311600	59.8
1992	555900	394600	71
1993	310900	156400	50.3
1994	266300	235600	88.5
1995	248600	194900	78.4
1996	241500	181700	75.2
1997	180900	121600	67.2
1998	30700	29900	97.4
1999	3700	2700	73
2000	18700	14200	75.9
2001	30400	14600	48
2002	2700	2700	100
2003	-	-	-
2004	800	-	-

Table 5.3—Continued

In All Other Buildings			Overall Vacancy	
Total Floor Space	Amount Vacant	% Vacant	Amount Vacant	% of Total Stock
5015536	N/A	N/A	171100	3.3
5212936	N/A	N/A	156100	2.8
5576800	80100	20.90	383900	6
6374800	73600	15.60	472800	6.3
7425700	81100	14.00	581000	6.7
8630600	100500	1.20	476100	5
9534900	191200	2.00	795000	7.5
10610100	511700	4.80	1219000	10.5
11627000	675100	5.80	1088500	8.9
12244000	475300	3.90	656900	5.2
12665300	382900	3.00	715900	5.5
13098200	238500	1.80	515900	3.8
13920700	60800	0.40	247200	1.7
14400500	119700	0.80	703600	4.5
15442900	377200	2.40	832600	5.1
16095000	603700	3.80	885800	5.3
16592500	742100	4.50	1053700	6.2
17054200	739200	4.30	1133800	6.4
17330800	912800	5.30	1069200	6.1
17340600	872200	5.00	1107800	6.3
17438800	1205600	6.90	1400500	7.9
17577300	1943700	11.10	2125400	11.9
17750000	1680300	9.50	1801900	10
17884900	1907900	10.70	1937800	10.8
17880200	1728000	9.70	17300700	9.7
17526300	1469900	8.40	1484100	8.5
17539100	1908200	10.90	1922800	10.9
17556900	1837600	10.50	1840300	10.5
17462500	1844400	10.60	1844400	10.6
17479200	1512400	8.70	1512400	8.7

(Adapted from Hong Kong Government Rating and Valuation Department, Hong Kong Property Review, Hong Kong: Printing Department (Various issues)

CHAPTER 6

RESULTS AND INTERPRETATION

Results from Using Aggregate Data

To prove the hypotheses mentioned in the preceding chapter, the first method we used is the aggregate approach. In this approach, the average success rate is calculated by dividing the number of successful applications by the total number of applications. The approach aims at providing a general trend and a preliminary glance for the behaviour of the Town Planning Board in granting planning permissions.

Table.6.1 Site area distribution of 1991 planning applications for uses in Industrial Zones and the success rates for obtaining planning permissions

Site Area	Approvals	Total	Success Rate (%)
Small than 0.1 ha	208	287	72.47%
0.1 ha to 1 ha	544	733	74.22%
Larger than 1 ha	53	65	81.54%
N/A	715	906	78.92%
Total	1520	1991	76.34%

Table.6.2 Gross floor area distribution for 1991 planning applications for uses in Industrial Zones and the success rates for obtaining planning permissions

GFA	Approvals	Total	Success Rate (%)
Smaller than 5000 m2	968	1259	76.89%
5000 m2 to 50000 m2	379	500	75.80%
Larger than 50000 m2	75	103	72.82%
N/A	98	129	75.97%
Total	1520	1991	76.34%

The aggregate success rate for site area increases with the increase in area and there is a remarkable high success rate for a site with an area of over 1 hectare. This shows that the Town Planning Board tends to grant planning permissions to those sites with larger site area. However, the result for site area of larger than 1 hectare needs to be interpreted with caution due to the small amount of data available.

The above result is contrary to that obtained from the proposed GFA. In the GFA analysis, the success rate decreases with an increase in proposed GFA. However, the percentages for the three classes of GFA are more or less the same, meaning that the Board does not have significant bias towards higher GFA in determining planning approvals.

Table.6.3 Location distribution for 1991 planning applications for uses in Industrial Zones and the success rates for obtaining planning permissions

Location	Approvals	Total	Success Rate (%)
Hong Kong	238	300	79.33%
Kowloon	692	950	72.84%
Development Permission Area	0	0	0
New Towns	583	729	79.97%
Rural	7	12	58.33%
Total	1520	1991	76.34%

The success rates for planning applications in Hong Kong, Kowloon and New Towns are close to each other which indicates that the Town Planning Board has no significant tendency in the above three region to grant planning permissions. However, the success rates in the rural area are significantly low, meaning that it is less likely to obtain planning permissions in rural area than the other three regions. Nevertheless, the exceptionally small number of applications in the rural area reduces the reliability of the result.

Table 6.4 Use distribution for 1991 planning applications for uses in Industrial Zones and the success rates for obtaining planning permissions

Use Applied for	Approvals	Total	Success Rate (%)
Commercial	554	783	70.75%
Office	523	674	77.60%
Residential	34	39	87.18%
Industrial/Office Building	262	317	82.65%
Industrial (Offensive)	38	42	90.48%
Local Provision Store	73	78	93.59%
Hardware Shop	53	53	100.00%
Restaurant	72	119	60.50%
Others	123	198	62.12%
Total	1732	2303	75.21%

Generally, the success rates for the above 8 uses are over 60%, which show that the probability for obtaining planning permission in the Industrial zone is high. The success rates for hardware shop, local provision store, offensive industry and residential use are 100%, 93.59%, 90.48% and 87.18% respectively. Their high success rates should be looked at cautiously as the data sets available for them are small. The success rates for restaurant is less than those of the other uses. This may be because the Town Planning Board does not prefer to grant uses involving a high customer flow.

Table 6.5. The success rate for obtaining planning permission for different uses in 1991 planning applications before and after 2001.

Use Applied for	Success Rate after 2001	Success Rate before 2001
Commercial	76.67%	70.87%
Office	76.67%	74.07%
Residential	-	72.50%
Industrial/Office Building	100%	77.87%
Industrial (Offensive)	-	62.16%
Local Provision Store	100%	85.53%
Hardware Shop	100%	86.54%
Restaurant	73.91%	73.20%

The success rates after 2001 for all the uses, except that of residential and offensive industry uses, are higher than that before 2001. This shows that the Town Planning Board does follow its guidelines in relaxing its control to grant planning permission in the Industrial zones so as to cope with the change in economy. There were no planning application for change in use as to residential and offensive industrial use after 2001 and so no comparison can be drawn.

Table 6.6. Number of total and successful applications by year by stage of applications in industrial zones.

Year	S.16 Planning Applications			S.17(1) Planning Reivews		
	Approvals	Total	Success Rate (%)	Approvals	Total	Success Rate (%)
1975	1	1	100.00%	0	0	-
1976	4	7	57.14%	1	1	100.00%
1977	7	10	70.00%	1	2	50.00%
1978	17	21	80.95%	4	4	100.00%
1979	10	21	47.62%	4	8	50.00%
1980	12	24	50.00%	4	7	57.14%
1981	14	22	63.64%	3	5	60.00%
1982	22	27	81.48%	1	2	50.00%
1983	20	28	71.43%	1	5	20.00%
1984	18	22	81.82%	2	2	100.00%
1985	27	32	84.38%	0	0	-
1986	17	27	62.96%	0	0	-
1987	39	77	50.65%	4	7	57.14%
1988	51	72	70.83%	12	18	66.67%
1989	62	109	56.88%	0	8	-
1990	41	91	45.05%	6	12	50.00%
1991	51	82	62.20%	3	16	18.75%
1992	73	105	69.52%	1	4	25.00%
1993	102	132	77.27%	2	5	40.00%
1994	242	296	81.76%	6	13	46.15%
1995	116	138	84.06%	8	17	47.06%
1996	124	149	83.22%	3	9	33.33%
1997	139	164	84.76%	2	10	20.00%
1998	39	62	62.90%	2	7	28.57%
1999	34	48	70.83%	1	4	25.00%
2000	80	91	87.91%	1	1	100.00%
2001	45	53	84.91%	1	3	33.33%
2002	11	11	100.00%	0	0	-
2003	10	14	71.43%	1	1	100.00%
2004	14	27	51.85%	0	1	-
Jun-05	11	19	57.89%	0	1	-
Total	1453	1982	73.31%	74	173	42.77%

Table 6.6.—Continued

Year	Petitions to Governor-in-Council (before 1997)/S.17B Planning Appeals(after 1997)			Extention of Time Limit		
	Approvals	Total	Success Rate(%)	Approvals	Total	Success Rate(%)
1975	0	0	-	0	0	-
1976	0	0	-	0	0	-
1977	0	0	-	0	0	-
1978	0	0	-	0	0	-
1979	0	0	-	0	0	-
1980	0	0	-	0	0	-
1981	0	0	-	0	0	-
1982	0	1	-	0	0	-
1983	0	0	-	0	0	-
1984	0	0	-	0	0	-
1985	0	0	-	0	0	-
1986	0	0	-	0	0	-
1987	0	0	-	0	0	-
1988	0	0	-	0	0	-
1989	0	0	-	0	0	-
1990	0	1	-	0	0	-
1991	0	0	-	0	0	-
1992	0	3	-	1	1	100.00%
1993	0	0	-	1	1	100.00%
1994	1	1	100.00%	4	4	100.00%
1995	0	4	-	2	2	100.00%
1996	0	0	-	13	13	100.00%
1997	0	0	-	7	8	87.50%
1998	0	0	-	7	8	87.50%
1999	0	0	-	1	1	100.00%
2000	0	0	-	0	0	-
2001	0	0	-	1	1	100.00%
2002	0	0	-	0	0	-
2003	0	1	-	2	2	100.00%
2004	0	1	-	0	0	-
Jun-05	0	0	-	0	0	-
Total	1	12	8.33%	39	41	95.12%

The aggregate data show that the success rates for s.16 application are much higher than those of the planning review and appeals. This indicates that the chance for obtaining planning permissions after a failure in s.16 planning applications is much lower.

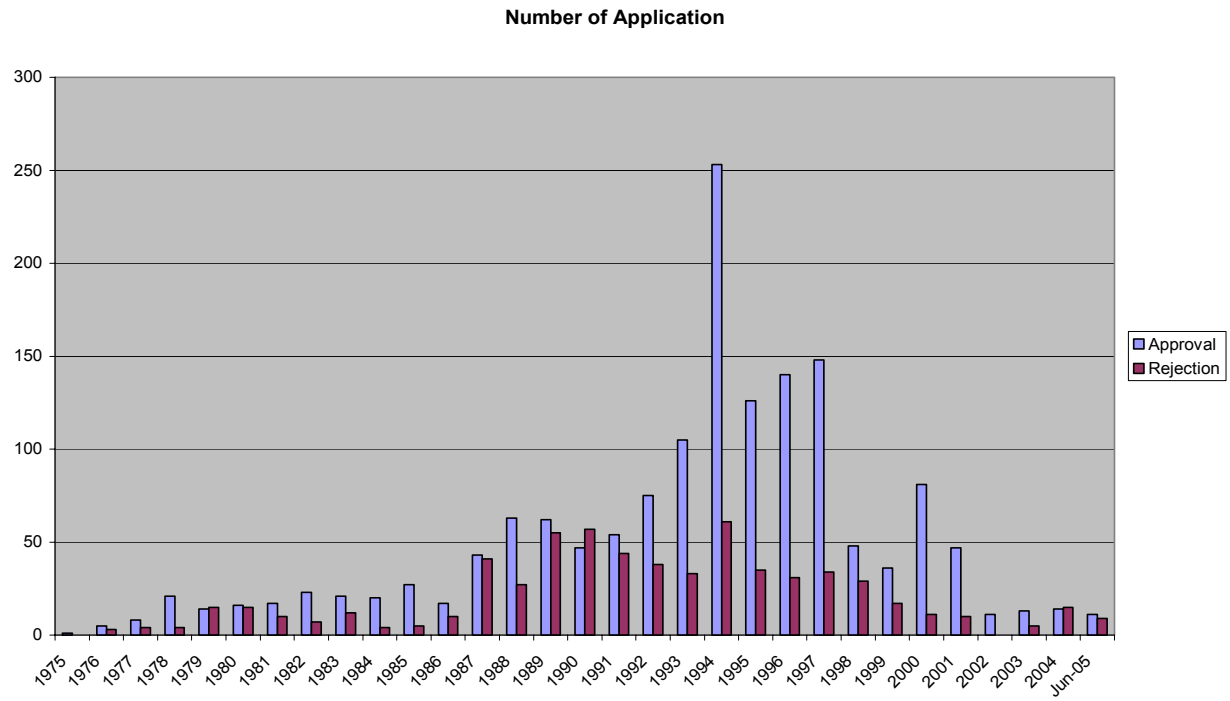

Fig. 6.1 Trends for obtaining planning approvals and rejections within Industrial Zones from 1975 to June 2005

The aggregate data also show a trend for the investigation of obtaining planning approval. It can be shown that the number of obtaining planning approval increased steadily from 1975 to 1993. The number increased dramatically from 1993 to 1994 and reached a peak at 1994. The number fell in 1995 but there was a steady rise in the number of planning permissions from 1995 to 1997. After 1997 the number falls with occasional rise in 2000 and 2001.

The tremendous rise in obtaining planning approvals in the period from 1992 to 1997 may be due to the effect from the “open door” policy of China which had caused the migration of the manufacturing sector from

Hong Kong to the mainland. The subsequent small rise in the period around 2001 may be due to the implementation of a new set of guidelines (TPB PG-No. 22B and 25B) which relaxed the planning control within the industrial zone.

The attempt for giving the above aggregate result is to give a preliminary test for the hypothesis. Whether the result is statistically significant needs to be proved by a more robust statistical method. Moreover, there are many limitations for using aggregate data (Brotherton 1982, 1992a, 1992b; McHamara and Healey 1984; Buller and Hoggart 1985; Larkham 1986, 1988, 1990s; Preece 1990; Sellgren 1990; Lai and Ho 2001d). First, it cannot indicate the significance of success rate of specific uses, regions and stages of development relative to other specific uses, regions and stage of development. Second, the average success rate cannot reveal the importance of the absolute number of applications for each use, region or size of development (with proposed GFA and site area as the proxy) under application. Therefore, a more robust test, which is the probit and logit tests, will be given later.

Probit Model

Probit Model offers a more comprehensive approach for investigating the effect of the independent variables on the dependant variable.

First Linear Test

We first put all the variables into one single equation by using EView as the computer software. In the first attempt, a total of 930 observations out of the 1991 observations are included in the analysis. The other variables are excluded due to unavailable information (lack of site area and proposed GFA) and the high correlation between some variables (SA and GFA are highly correlated). The result is not satisfactory. Only D_COM, D_RES and S16 are significant at the 5% significance level.

Table. 6.7. The profit results for the first equation including all the variables

Dependent Variable: DECISION Method: ML - Binary Probit Date: 01/06/06 Time: 16:44 Sample(adjusted): 8 1932 Included observations: 930 Excluded observations: 995 after adjusting endpoints Convergence achieved after 25 iterations Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
D_COM	-0.291	0.1082	-2.68949	0.0072
D_OFF	-0.00884	0.123739	-0.07147	0.943
D_RES	0.68201	0.301368	2.263049	0.0236
D_IO	0.278273	0.145251	1.915802	0.0554
D_OFFENSIVE	7.151564	211764.6	3.38E-05	1
D_LPS	0.567187	0.393315	1.442069	0.1493
D_HWSHOP	6.9501	245304.7	2.83E-05	1
D_REST	-0.29348	0.212699	-1.37978	0.1677
HK	1.208941	0.652253	1.853485	0.0638
KLN	1.029992	0.641608	1.605329	0.1084
NT	1.086204	0.638927	1.700042	0.0891
AF01	0.511635	0.282762	1.80942	0.0704
S16	0.778603	0.143007	5.444499	0
SA	1.27E-05	7.81E-06	1.62974	0.1032
GFA	-2.40E-06	1.71E-06	-1.40352	0.1605
VACANCY	0.037767	0.023478	1.608607	0.1077
C	-1.38372	0.660958	-2.0935	0.0363
Mean dependent var	0.737634	S.D. dependent var		0.440157
S.E. of regression	0.418579	Akaike info criterion		1.068904
Sum squared resid	159.9656	Schwarz criterion		1.157289
Log likelihood	-480.04	Hannan-Quinn criter.		1.102615
Restr. log likelihood	-535.231	Avg. log likelihood		-0.51617
LR statistic (16 df)	110.3803	McFadden R-squared		0.103115
Probability(LR stat)	3.33E-16			
Obs with Dep=0	244	Total obs		930
Obs with Dep=1	686			

To improve the accuracy of the model, several attempts are proposed. First, as can be seen from the above result, both D_OFFENSIVE and D_HWSHOP are significant at 100%. This is because all the planning applications for the above two uses are all approved by the Town Planning Board. Thus, the programme cannot estimate the coefficients for them and so D_OFFENSIVE is proposed to be excluded from the equation.

Second, as the correlation between SA and GFA is high (correlation= 0.564654)[39], one of them must be excluded from our estimation. The available data for site area is much less than GFA, so site area must be excluded. On top of that, it has been shown that the GFA does not produce a linear relationship with the success rate of planning applications (Lai and Ho 2001a, 2001b, 2001c, 2001d, Yung 2001).Therefore, it is suggested that ln(GFA) should be used in our equation to produce the best result.

In addition, the correlation between NT and KLN is very high (correletaion= 0.71687)[40] and there is considerable correlation between KLN and HK (correlation = -0.44501)[41]. In light of the correlation of KLN to the other two variables, KLN is excluded from our equation.

[39] See Appendix III
[40] *Ibid.*
[41] *Ibid.*

Optimal Equation

Our second attempt is to find the optimal equation which has the highest McFadden R-squared value. In addition, the Log likelihood and Likelihood ratio statistics (LR stat) should be compared. They are used to test the hypothesis that all the coefficients are simultaneously equal to 0. If the LR stat. is high, the null hypothesis[42] will be rejected.

In the process to search for the optimal equation, we find that ln(GFA) gives an equation with the highest McFadden-Squared value and LR stat. Therefore, ln(GFA) is used in our equation as a proxy for the scale of development. In fact, many researches have employed the use of ln(GFA) in the probit model (Lai and Ho 2001a, 2001b, 2002a, 2002b, 2002c and Chau and Lai 2004).

It is proposed to exclude D_OFFENSIVE in our equation. However, we find that its exclusion would lower the value of both McFadden Square and LR stat. In this regard, it is not excluded in our optimal equation.

The exclusion of one more variable, KLN, from the equation would lower the McFadden R-square from 0.117941 to 0.117272 and that of the LR

[42] The null hypothesis is the hypothesis that all the coefficients are equal to 0.

stat from 234.8651 to 233.5332. The change in value in both of the McFadden R-square and LR stat is small but the exclusion can lower the effect from the correlation between variables. Therefore, KLN would be included in our optimal equation.

In our optimal equation, we found that D_COM, D_HWSHOP, HK, NT and AF01 are not significant at the 5% significance level. The optimal equation is shown as follows,

Table.6.8. The probit results for the optimal equation

Dependent Variable: DECISION Method: ML - Binary Probit Date: 01/06/06 Time: 18:26 Sample(adjusted): 8 1936 Included observations: 1818 Excluded observations: 111 after adjusting endpoints Convergence achieved after 20 iterations Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
D_COM	-0.10173	0.080795	-1.25908	0.208
D_OFF	0.265469	0.090088	2.946761	0.0032
D_RES	0.876516	0.286006	3.064683	0.0022
D_IO	0.62644	0.140767	4.45E+00	0
D_OFFENSIVE	7.388718	452751.4	1.63E-05	1
D_LPS	0.630575	0.23877	2.64E+00	0.0083
D_HWSHOP	7.176772	351319.5	2.04E-05	1
D_REST	-0.40324	0.141539	-2.84897	0.0044
HK	0.202552	0.107319	1.887379	0.0591
NT	0.124977	0.079694	1.568203	0.1168
AF01	0.127125	0.188652	0.67386	0.5004
S16	0.824633	0.108537	7.597693	0
LN	-0.07552	0.01644	-4.59385	0
VACANCY	0.061427	0.014686	4.182762	0
C	-0.23489	0.188982	-1.24289	0.2139
Mean dependent var	0.762926	S.D. dependent var		0.425405
S.E. of regression	0.4	Akaike info criterion		0.983412
Sum squared resid	288.4802	Schwarz criterion		1.028837
Log likelihood	-878.922	Hannan-Quinn criter.		1.000172
Restr. log likelihood	-995.688	Avg. log likelihood		-0.48346
LR statistic (14 df)	233.5332	McFadden R-squared		0.117272
Probability(LR stat)	0			
Obs with Dep=0	431	Total obs		1818
Obs with Dep=1	1387			

Interpretation of the Results

Gross Floor Area (GFA)

In the optimal equation, the coefficient for ln(GFA) is negative and significant, meaning that the chance for obtaining planning approval for a larger site is less than that of a smaller site. This result is consistent with the results obtained from the aggregate data and it shows that there is no evidence for rent-seeking activities of the Town Planning Board. Therefore, Hypothesis 1 is refuted.

The above result is contrary to the results obtained from other scholars (Staley 1994, Hammer 1996, Lai 1997, Lai and Ho 2001a, Chan 2003). A larger GFA would mean a more comprehensive development which implied the more resourceful of the developers. The refutation of the hypothesis means that the Board does not favour larger developers in granting planning permissions.

Location Dummies

In our analysis, we employ HK, KLN, NT, DPA and RURAL area as our location dummies. However, as there are no planning applications applied in the DPA area, we excluded the variables from our consideration. In the estimation process, we use RURAL as our basis and other areas are compared with it. The result is that the coefficient for HK and NT are 0.202522 and 0.124977 respectively, which are all insignificant. Their insignificance indicates that they cannot be distinguished by the computer programme and that the Town Planning Board has no preference in granting planning permissions towards a particular region. Therefore, Hypothesis II is not refuted.

Use Dummies

For all the use dummies employed in the optimal equation, only D_COM is insignificant which indicates that the Town Planning Board has no preference in granting planning permissions when compared with other uses not indicated in our dummy variables. The coefficient for D_REST dummy is negative and significant, meaning that the probability of obtaining planning permission for restaurant use is lower compared with other uses. This is consistent with the guidelines (TPB PG-No. 25B) published by the

TPB in that “only activities that do not attract a large number of visiting members of the public to the premises due to the direct provision of customer services or goods will be permitted.”

The success rates for D_OFFENSIVE and D_HWSHOP are nearly 100%. This reveals that the Town Planning Board has a strong preference in granting planning permissions for offensive industrial and hardware shop uses. The coefficient for office, residential, industrial/office and local provision store, are all positive and significant. This shows that the TPB prefers to grant planning permissions for office, residential, industrial/office and local provision store to other use like commercial. The rationale is the same as that of restaurant use, which also involves a considerable flow of customers. Therefore, Hypothesis III is rejected.

Application Stage Dummy

In the optimal equation, the coefficient for the stage dummy is positive and highly significant. This indicates that the probability for obtaining approvals in s.16 application is higher compared with planning review and appeal. This is logical as the Town Planning Board claims that it would consider each planning application based on individual merit and on a case by case basis. Therefore, the success rates for a planning review or appeal

should be lower if nothing is changed in a particular application. Hypothesis IV is thus rejected.

Time Dummy

The coefficient for AF01 is positive and insignificant in our optimal equation. This indicates that the Town Planning Board does not actually ease its control in granting planning permissions after the announcement of its new guidelines in January 2001. The result is contrary to Wan (2003), Kwong(2004) and the above aggregate analysis.

The statistical insignificance of the time dummy means that the TPB does not follow its guidelines which aim at "allow[ing] maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings" and "relax[ing] the control on offices related to industrial uses and trading firms which require large storage space and frequent loading/unloading." [43] Therefore, Hypothesis V is not refuted.

[43] TPB PG-No.25B

Vacancy Rate Variable

The coefficient for the vacancy variable is positive and significant meaning that the Town Planning Board would grant planning permissions more willingly at the time when the vacancy rate of industrial units is high. This reflects that TPB's decision in granting planning approvals is responsive to the market situation. Therefore, Hypothesis VI is rejected.

Both Hypotheses V and VI represent Town Planning Board's attitude towards economic and market situation in granting planning permissions. However, only Hypothesis VI is rejected but not hypothesis V. This disparity may be due to a smaller sample of data in or after 2001 as compared to that before 2001. In addition, the vacancy variable is a more direct variable in representing the general market situation as compared to the time variable. The time variable is more representative in respect of the adherence of the Board to its guidelines.

The Logit Model

To be more comprehensive, we also put the optimal equation in the logit model. The use of this model also allows us to compare the results obtained from the probit model with that from the logit model and a better result may be obtained.

Table 6.9. The logit results for the optimal equation

Dependent Variable: DECISION Method: ML - Binary Logit Date: 01/07/06 Time: 01:50 Sample(adjusted): 8 1936 Included observations: 1818 Excluded observations: 111 after adjusting endpoints Convergence achieved after 25 iterations Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
D_COM	-0.16869	0.138748	-1.21584	0.224
D_OFF	0.445795	0.154717	2.88135	0.004
D_RES	1.557619	0.531874	2.928547	0.0034
D_IO	1.053739	0.241654	4.360527	0
D_OFFENSIVE	31.93938	2604615	1.23E-05	1
D_LPS	1.207377	0.486044	2.484091	0.013
D_HWSHOP	31.76344	2035444	1.56E-05	1
D_REST	-0.69274	0.234467	-2.95451	0.0031
HK	0.334949	0.18583	1.802449	0.0715
NT	0.218014	0.13762	1.58418	0.1132
AF01	0.233636	0.333126	0.701343	0.4831
S16	1.357655	0.179465	7.565026	0
LN	-0.12631	0.027654	-4.56759	0
VACANCY	0.103575	0.025513	4.059748	0
C	-0.39944	0.322041	-1.24035	0.2148
Mean dependent var	0.762926	S.D. dependent var		0.425405
S.E. of regression	0.400103	Akaike info criterion		0.984145
Sum squared resid	288.629	Schwarz criterion		1.02957
Log likelihood	-879.588	Hannan-Quinn criter.		1.000904
Restr. log likelihood	-995.688	Avg. log likelihood		-0.48382
LR statistic (14 df)	232.2015	McFadden R-squared		0.116604
Probability(LR stat)	0			
Obs with Dep=0	431	Total obs		1818
Obs with Dep=1	1387			

The result for the logit model is similar to that of the probit model. The value of McFadden R-square and LR stat. are also close to our optimal equation. Moreover, the sign and significance of the coefficients of the dummy variables are the same as the probit model. Therefore, logit model can also be used for analyzing planning statistics. Wan (2003) also arrived at the same conclusion.

CHAPTER 7

CASE STUDIES

The Study Area—Kwai Chung

The probit and logit models are robust statistical tests which give the statistical significance of different variables. However, there are other factors that the two models cannot take into account. These variables are generally qualitative in nature and can hardly be given an index to them. In this sense, three case studies are conducted to find out other factors that the Town Planning Board may consider when determining planning permissions.

The chosen area for the three case studies is Kwai Chung. From the website of the Town Planning Board[44], we found that there is a total of 120 records for planning applications in Kwai Chung from 1990 to 2005. Out of the 120 records in the specified period, we found that there are 11 cases of approved decisions, 3 of "approved with time limit", 29 cases of "approved temporarily", 49 cases of "approved with conditions", 37 cases of rejection, 5 cases of "deferred decision" and 1 case of dismissed decision. A trend showing the approval and rejection rates in Kwai Chung is given as follows. In the graph, we put the four kinds of "approvals", namely, "approved",

[44] Town Planning Board, http://www.info.gov.hk/tpb/index_e.htm

"approved with time limit", "approved temporarily" and "approved with conditions", as approvals in the graph. The cases for deferred and dismissed decision are not included as only a few records are obtained.

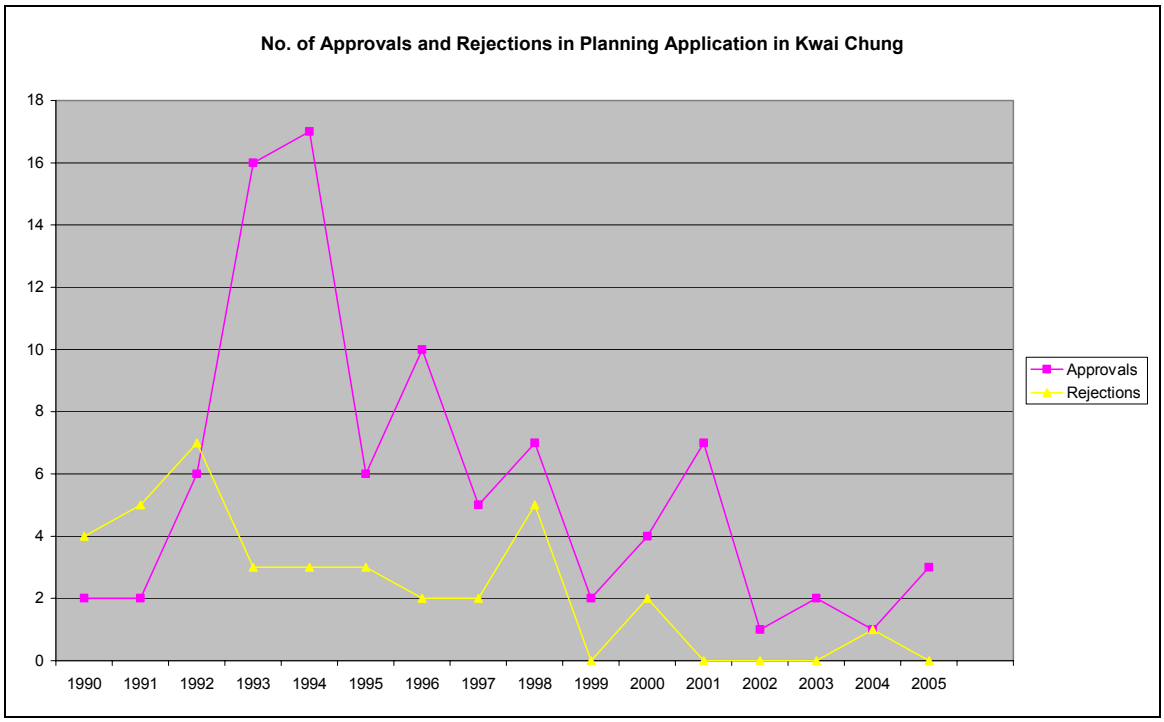

Fig. 7.1. Number of approvals and rejections of planning applications in Kwai Chung

The trends for approvals and rejections in planning application match the general economic environment of the whole territories. Starting from 1990, the Gross Domestic Product of the manufacturing industry started to fall. The number of persons engaged in the manufacturing industry also fell from 1990 together with a similar but opposite trend in the unemployment rate in the manufacturing industry in Hong Kong. On the other hand, the rate for obtaining planning approval in Kwai Chung started to rise from 1990. This similarity in the directions of approvals and the economic indicators

sheds some light on the responsiveness of Town Planning Board's consideration in granting planning approval. The number of rejections in planning application assumes a decreasing trend from 1990, which is consistent with the implications discussed above.

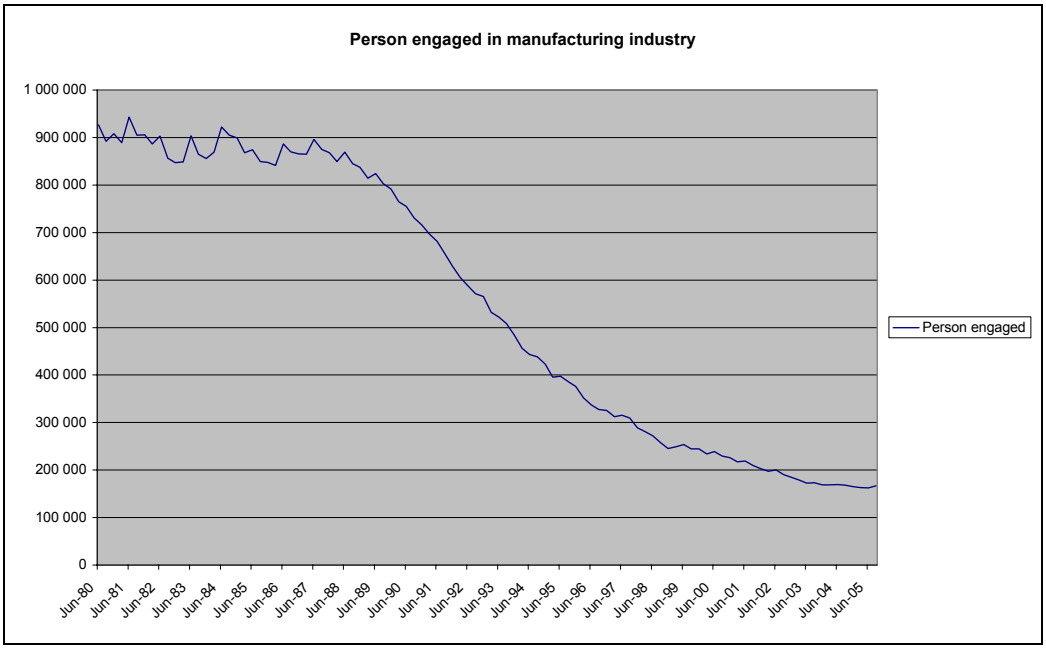

Fig.7.2 Number of persons engaged in the manufacturing industry in Hong Kong from June 1980 to June 2005

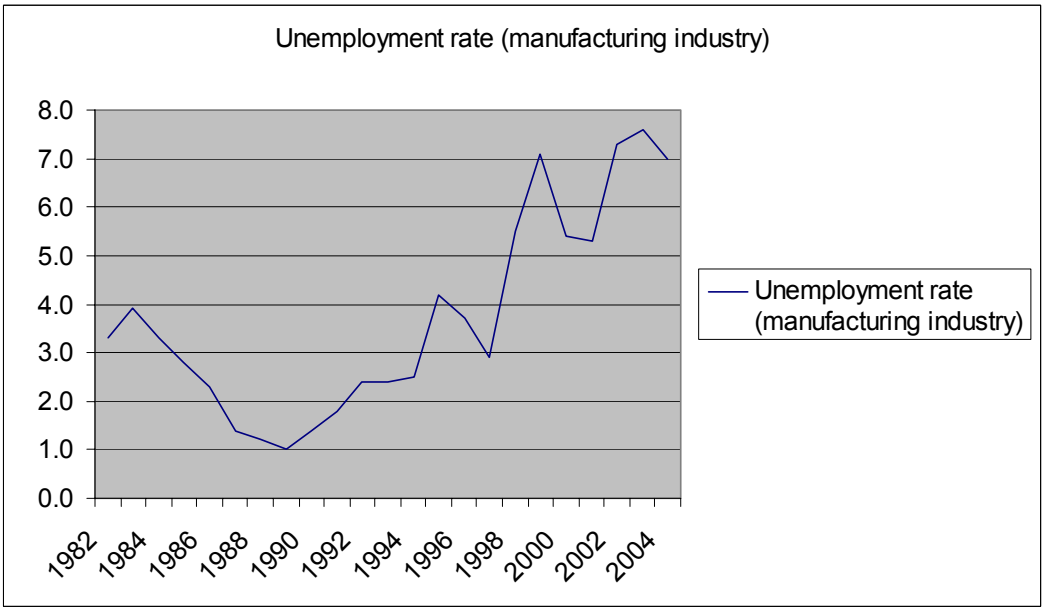

Fig.7.3 Unemployment rate for the manufacturing industry in Hong Kong from 1982 to 2004

Background of cases

Among the 120 records obtained from the Town Planning Board, we selected three buildings for further study as their information was more sufficient from our sample. The three buildings are Vanta Industrial Centre, Effort Industrial Building and Riley House. Vanta Industrial Centre and Effort Industrial Building are selected as the success rates for obtaining planning approval in their application are very high[45]. Their high success rates can provide some clues on the factors for obtaining planning approvals. In addition, the applied uses for Vanta are mainly office and showroom while that for Effort are mainly shops and services. The use of two buildings with different applied uses can enhance the comprehensiveness of the sample. Riley House is chosen as the rejection rate for planning application is 100%. The high rejection rate can provide some light on the determining factors of the Town Planning Board.

The details of the planning application of Vanta Industrial Centre (Vanta), Effort Industrial Building (Effort) and Riley House (Riley) are shown below.

[45] The success rates for Vanta Industrial Centre and Effort Industrial Building are 95% and 80% respectively. We drop out the case if the decision is deferred or dismissed by the TPB from our calculation of the success rate.

Table 7.1. Detailed information for the planning applications arising from Vanta Industrial Centre

Vanta Industrial Centre (21-33 Tai Lin Pai Road)
Builing Management Body: Citybase Property Management Co. Ltd
Storey: 18

Number	Floor	Unit	Applied Use	Applied Year	Decision	Usable Floor Area (Sq. ft.)	Gross Floor Area (Sq. ft.)	Site Area (Sq. ft.)
1	6	16	office	1991	Approved	58	N/A	5510
2	6	12	Showroom and Office	1991	Approved Temporarily	222	N/A	10963
3	6	16	Showroom	1992	Approved	N/A	19	5510
4	5	19	office	1992	Approved Temporarily	212	N/A	N/A
5	8	11	office	1992	Approved Temporarily	87	N/A	N/A
6	6	9	office	1993	Approved Temporarily	85	N/A	222
7	7	9	office	1993	Approved Temporarily	71	N/A	N/A
8	5	12	office	1993	Approved Temporarily	84	N/A	N/A
9	9	11(part)	office	1993	Approved Temporarily	70	N/A	N/A
10	9	7	office	1993	Approved Temporarily	155	N/A	N/A
11	9	17	office	1993	Approved Temporarily	70	N/A	N/A
12	9	14 and 15	office	1993	Approved Temporarily	120	N/A	N/A

Table 7.1—Continued

Number	Floor	Unit	Applied Use	Applied Year	Decision	Usable Floor Area (Sq. ft.)	Gross Floor Area (Sq. ft.)	Site Area (Sq. ft.)
13	9	13(part)	office not ancillary to industrial use	1994	Approved Temporarily	245	N/A	N/A
14	4	403 and 406	office	1994	Approved Temporarily	N/A	N/A	N/A
15	4	401	office	1994	Approved Temporarily	59	N/A	N/A
16	10 and 12	1009-10 and 1205-7	office	1994	Approved Temporarily	399	N/A	N/A
17	12	12	office	1995	approved	86	N/A	N/A
18	12	8	office	1996	Approved Temporarily	74	N/A	N/A
19	13	7	office	1996	Approved Temporarily	200	N/A	N/A
20	14	2	showroom	2000	Rejected	222	N/A	N/A

Table 7.2. Detailed information for the planning applications arising from Effort Industrial Building

Effort Industrial Building (2-8 Kung Yip Street) **Residents' Organization: The Incorporated owners of Effort Industrial Building** **Building Management Body: Hong Yip Service Company Ltd** **Storey: 13**								
Number	Floor	Unit	Applied Use	Applied Year	Decision	Gross Floor Area (Sq. ft.)	Site Area (Sq. ft.)	Floor Area(Sq. ft)
1	N/A	N/A	Bank	1990	Approved with Time Limit	179	1737	N/A
2	G	B	Retail Shop(Local Provision Store)	2002	Approved with Conditions	N/A	N/A	12.8
3	4	D	Proposed 'Training' Centre	2002	Deferred	149.7	N/A	N/A
4	4	D	Proposed 'Training' Centre	2003	Approved	149.7	N/A	N/A
5	11	B	Showroom	2003	Approved	N/A	N/A	37.1
6	3	F	Place of Recreation, Sports or Culture (Studio for Physical Exercises & Training)	2004	Rejected	N/A	N/A	92.94

Table.7.3 Detailed information for the planning applications arising from Riley House

Riley House (88 Lei Muk Road) **Residents' Organization: The Incorporated owners of Riley House** **Building Management Body: Winland Property Management Limited** **Storey: 25**									
Number	Floor	Unit	Applied Use	Applied Year	Decision	Usable Floor Area (Sq. ft.)	Gross Floor Area (Sq. ft.)	Site Area (Sq. ft.)	Floor Area(Sq. ft)
1	1	3	Bank	1992	Rejected	N/A	93	7266	N/A
2	Upper Ground Floor	Workshop	Showroom	1992	Rejected	N/A	N/A	7266	N/A
3	1	101	Retail Shop(Supermarket)	1992	Rejected	N/A	430	7266	N/A
4	1	102	Fast Food Shop	1992	Rejected	N/A	476	7266	N/A
5	1	103	Proposed Bank	1992	Rejected	188	N/A	7266	N/A
6	1	103A	Bank	1993	Rejected	291	N/A	N/A	N/A

Objectives of the study

1. To find out the material considerations of the Town Planning Board in granting planning permission.
2. To find out the reasons contributing to the high success and rejection rate in planning application of individual building.

Statutory Grounds

In order to obtain a planning approval, the planning application should be made in accordance with the statutory plan, which is the outline zoning plan (OZP) for the specified area. In the OZP, there are two columns of uses. For uses within column one, there is no need for planning application as they are always permitted. For column two uses, planning application is required. If the applicant fails to obtain planning application, he can apply for a review under s. 17(1) of the Town Planning Ordinance (TPO). If the applicant feels aggrieved with the decision in a review, he can still apply for an appeal under s. 17(B) of the TPO. If the use does not fall within any of the above columns, one can apply for rezoning.

For a change in use within a column two uses, planning application is required. Often, the Board would make a decision based on the planning

intention of the statutory plan, the Town Planning Ordinance (Cap. 131, Laws of Hong Kong) and also the merit of the case.

The *Town Planning Ordinance* (TPO) stipulates the intention of the Ordinance,

> "To promote the health, safety, convenience and general welfare of the community by making provision for the systematic preparation and approval of plans for the lay-out of areas of Hong Kong as well as for the types of building suitable for erection therein and for the preparation and approval of plans for areas within which permission is required for development."

(Long Title, *Town Planning Ordinance*, Cap. 131, Laws of Hong Kong)

In the Notes in the OZP, the planning intentions for different zones are specified. Lai (2003) provides that planning intention can also be found in the following documents,

1. the Town Planning Ordinance
2. the Outline Zoning Plan, or other statutory plans

3. the Outline Zoning Plan that replaces the DPA Plan within which the application was made
4. the Outline Zoning Plan, or any other statutory plans, as interpreted by the District Planning Office
5. the District Planning Officer's opinion before the Appeal Board
6. Notes to the Outline Zoning Plan, or other statutory plans
7. the Schedule of Amendments of the OZP
8. the Explanatory Statement of the OZP, or the other statutory plans
9. the relevant Town Planning Board Guidelines
10. subregional Land Use Plan
11. development Statements
12. departmental/ administrative plans: Layout Plans
13. the Town Planning Board in making decisions

In this case study, the statutory requirements are investigated with reference to the current statutory town plan with Cases 2, 4 and 5 in Effort Industrial Building for illustration. The three cases are chosen because their application was made after the gazette of the new OZP and Town Planning Board Guidelines for the area. In the Outline Zoning Planning of Kwai Chung (S/KC/21), the planning intention of the Industrial Zones is given as follows,

"This zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone."

The Explanatory Statement, it further clarifies the planning intention. "The planning intention of the "I" Zones is to reserve land primarily for general industrial uses to ensure an adequate supply of industrial floor space. Information technology and telecommunications industries are considered suitable to operate in industrial buildings. Office related to industrial use, being an integral part of industrial function, is also permitted as of right in the "I" Zones. However, general commercial and office uses, other than those permitted on the purpose-designed non-industrial portion on the lower floors of an existing building separated by a buffer floor, will require planning permission from the Board." (Explanatory Statement of OZP S/KC/21, p. 7)

In the cases in Effort Industrial Building, the applied use for cases 2, 4 and 5 are retail shop (local provision store), proposed 'training' centre and showroom respectively. The applied uses are regarded as 'general commercial uses' and would require planning permission from the TPB.

Moreover, the Town Planning Board Guidelines (TPB PG-NO. 25B), provides clear rules for planning applicants.

“For a proposed commercial use in an industrial building or on the upper floors of an I-O building, the following main planning criteria are relevant:

a. It should be demonstrated that there is a genuine need for the proposed use under application and no suitable alternative accommodation can be found in the vicinity. The location and scale of the proposed use should be justified on operational grounds.

b. Depending on the circumstances of individual cases and the availability of I-O or 'business' buildings in the vicinity at the time of application, the Board may grant temporary permission for showroom use exceeding 20% of the total UFA of an industrial firm in industrial buildings.

c. Provided that other criteria could be met and with good justifications, favourable consideration would be given to applications for showrooms requiring large floor area for the display of bulky goods and provision of adequate on-site loading/ unloading facilities, which could not normally be accommodated in conventional commercial/office buildings.

d. There should be an adequate provision of parking and loading/unloading facilities within the site in accordance with the Hong Kong Planning Standards and Guidelines and to the satisfaction of the Transport Department. The inclusion and operation of the proposed commercial use should not adversely affect the traffic conditions in the local road network.

e. The Fire Services Department (FSD) should be satisfied on the risks likely to arise or increase from the proposed commercial use under application. For shop and services use proposed on ground floor, it should generally be small in scale, and the means of escape (such as direct discharge to street) and other fire safety installations should meet FSD's requirements."

(TPB-PG NO. 25B, *para.* 6.2)

In the case of Effort, the application should not contradict the aim for TPO which aims to provide health, safety, convenience and general welfare for the community. The applicant should also prove to the Board that there is a genuine need for the uses in the community and that there is no alternative use in the surrounding area. Sufficient parking and loading/unloading facilities should be provided together with the satisfaction of fire safety requirements. For showroom, the area should not exceed 20% of the usable

floor area of the industrial firm or else planning application is required.[46] We will go into details for the above criteria in the following section. On top of that, the statutory plan, the TPO, its accompanying explanatory statement and the guidelines provide some clues on the planning intention of the Board.

Possible Material Considerations

The Town Planning Board would consider planning applications based on their individual merits on a case-by-case basis. In this section, we try to find out the possible material considerations the Board takes in granting a planning approval.

[46] Refer to TPB PG-NO. 25B, *para*. 4.5

Age of Buildings

Table. 7.4. Table showing the year built, age and applied year of planning applications in Vanta Industrial Centre, Effort Industrial Building and Riley House

Name of Buildings	Year Built[47]	Age	Applied Year	Success Rate (%)[48]
Vanta Industrial Centre	1988	18	1991-96, 2000	95
Effort Industrial Building	1978	28	2002-04	80
Riley House	1992	14	1992-93	0

.

As can be seen from the above, the Town Planning Board prefers to grant planning permission for older buildings. Though Effort Industrial Building has been built for 28 years, it still has a high success rate of 80%. In addition, when seeing the age of the building relative to the applied year, it can be shown that the Town Planning Board is unlikely to grant planning permission shortly after the building has been established. This is logical as granting permission shortly after the new establishment would contradict the planning intention of the original plan. The Town Planning Board does not allow a major change in use of the land for a newly established building.

[47] The year built of the buildings are obtained from Hong Kong Government Rating and Valuation Department (2005), Names of Buildings: the New Territories, Hong Kong: Printing Department.

[48] The success rate is calculated as the percentage of obtaining planning approval with respect to the total number of applications contained in our sample.

For these factors, we would select two, three and four cases respectively from Effort, Vanta and Riley for illustration.

Table.7.5 Applied area for the selected cases in Vanta Industrial Centre, Effort Industrial Building and Riley House

Name of Buildings	Floor	Unit	Applied Use	Applied Year	Type of consideration	Decision	Authority	Usable Floor Area (Sq. ft.)	Gross Floor Area (Sq. ft.)	Site Area (Sq. ft.)	Floor Area(Sq. ft)	No. of Storeys
Vanta	6	12	Showroom and Office	1991	Planning Application	Approved Temporarily	Metro Planning Committee	222	N/A	10963	N/A	17
Vanta	6	16	Showroom	1992	Planning Application	Approved	Metro Planning Committee	N/A	19	5510	N/A	17
Vanta	14	2	showroom	2000	Planning Application	Rejected	Metro Planning Committee	222	N/A	N/A	N/A	17
Effort	11	B	Showroom	2003	Planning Application	Approved	Metro Planning Committee	N/A	N/A	N/A	37.1	13
Rilery	Upper Ground Floor	Workshop	Showroom	1992	Planning Application	Rejected	Metro Planning Committee	N/A	N/A	7266	N/A	25
Effort	N/A	N/A	Bank	1990	Planning Application	Approved with Time Limit	Town Planning Board	N/A	179	1737	N/A	13
Rilery	1	3	Bank	1992	Planning Application	Rejected	Metro Planning Committee	N/A	93	7266	N/A	25
Riley	1	103	Proposed Bank	1992	Planning Application	Rejected	Metro Planning Committee	188	N/A	7266	N/A	25
Riley	1	103A	Bank	1993	Planning Application	Rejected	Metro Planning Committee	291	N/A	N/A	N/A	25

No conclusion can be drawn from our case study as regards the area for the applied use and the floor on which a unit lies. For showroom use, no pattern for planning permission can be drawn from the study. The Board would permit or reject an applied showroom use no matter whether it is on lower or middle floor. The same conclusion is obtained from the applied area. In the case study, the Board would grant permissions to showroom uses even the area is as large as 222 sq. ft and as small as 19 sq. ft. The Board would reject showroom use for the same area of 222 sq. ft in another application for showroom use in the same building. For bank use, the Board has granted a planning permission for an area for 179 sq. ft but it has rejected a planning permission for an area of 93 sq. ft. As the behaviour for the Board in response to the factors of area and floor is random, no conclusion can be drawn in this regard.

Market conditions and Future Market

In the case of Vanta, the recorded planning applications for office use started from 1991. Most of the office applications for Vanta were recorded in the Year 1993 followed by 1994. This pattern can be explained by the vacancy rate for private office at the time.

Return back to the records, there was a shortfall in available office space in 1988 when the vacancy rate reached the trough. Due to the time lag for the effect to be absorbed, the Board responded to the effect a few years later. Therefore, it would be possible that the Board tend to grant planning permission for office in 1991 and continue through 1993 and 1994.

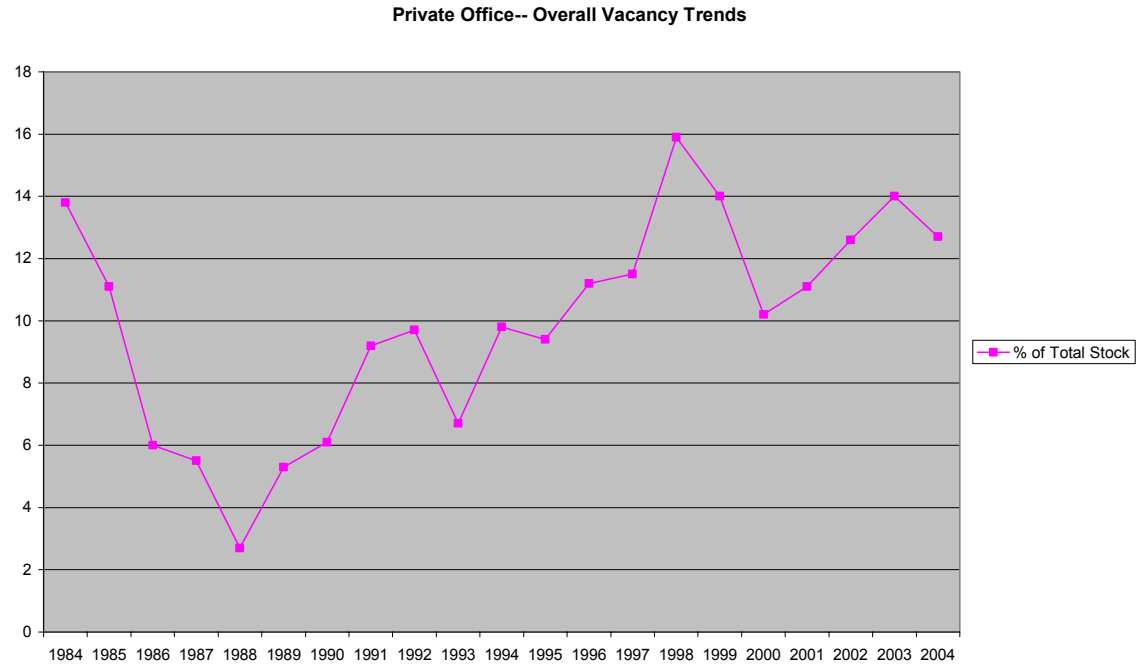

Fig. 7.4 Overall Vacancy Trends of Private Office in Hong Kong from 1994 to 2004

The high rate for office application in 1993 and 1994 can also be explained further by the office vacancy rate in Tseun Wan[49].

[49] Kwai Chung was within the district of Tsuen Wan before 2003 for the data obtained in Hong Kong Property Review. For simplicity, the data on or after 2003 for Kwai Tsing are included in Tsuen Wan.

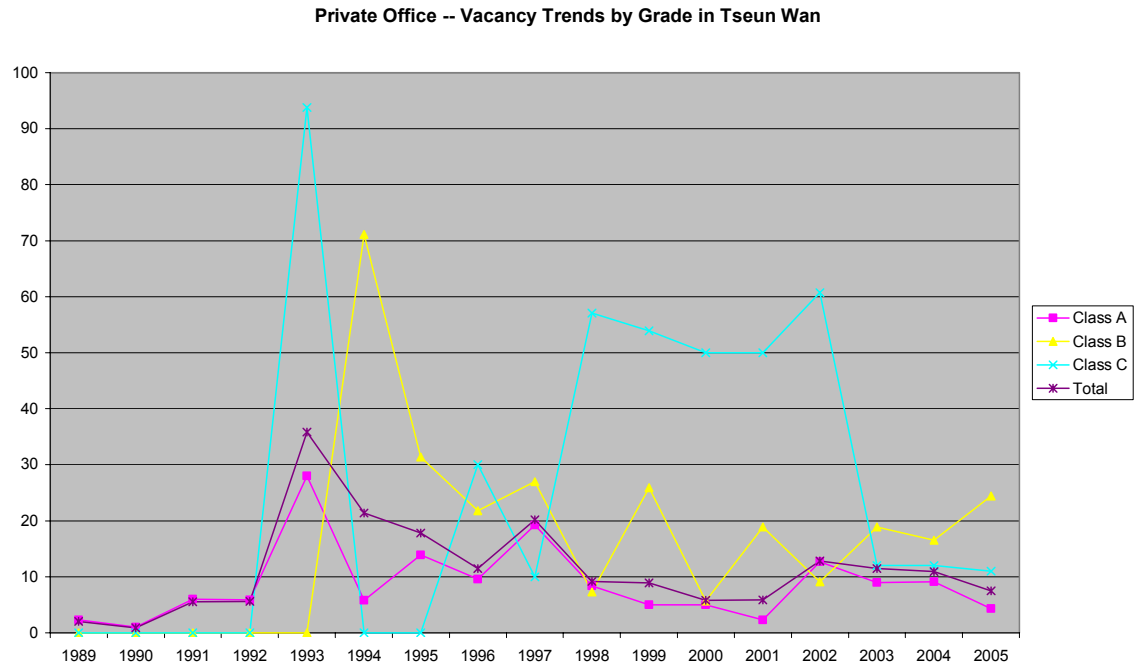

Fig. 7.5 Vacancy Trends of Private Office in Tseun Wan by Grade from 1989 to 2005

From the Figure 7.5, the total office vacancy rate in Tseun Wan was low from 1989 to 1992. The Board saw the shortage in office space and would prefer to grant planning permission in this sense so as to increase the supply of office space to cater for the increased demand.

In addition, the historical record may also suggest that the Board takes into account the future market when making its decision. From the above graph, the vacancy rates from 1999 to 2005 remain at low levels. The Board might have made such forecasts and granted planning permissions in the light of a predicted low vacancy rate.

The above provides evidence that the Board's decision to grant planning permissions is responsive to market conditions. In addition, the Board would take into account the need for the applied use and the future market when making a decision to planning permission.

Traffic Conditions

Traffic conditions around the building concerned may be a crucial factor in obtaining planning permission. The applied use should not create any inconvenience to the current traffic in the area. The Board may assess the possible effect to the traffic resulted from a change in use when considering planning applications.

Vanta Industrial Centre

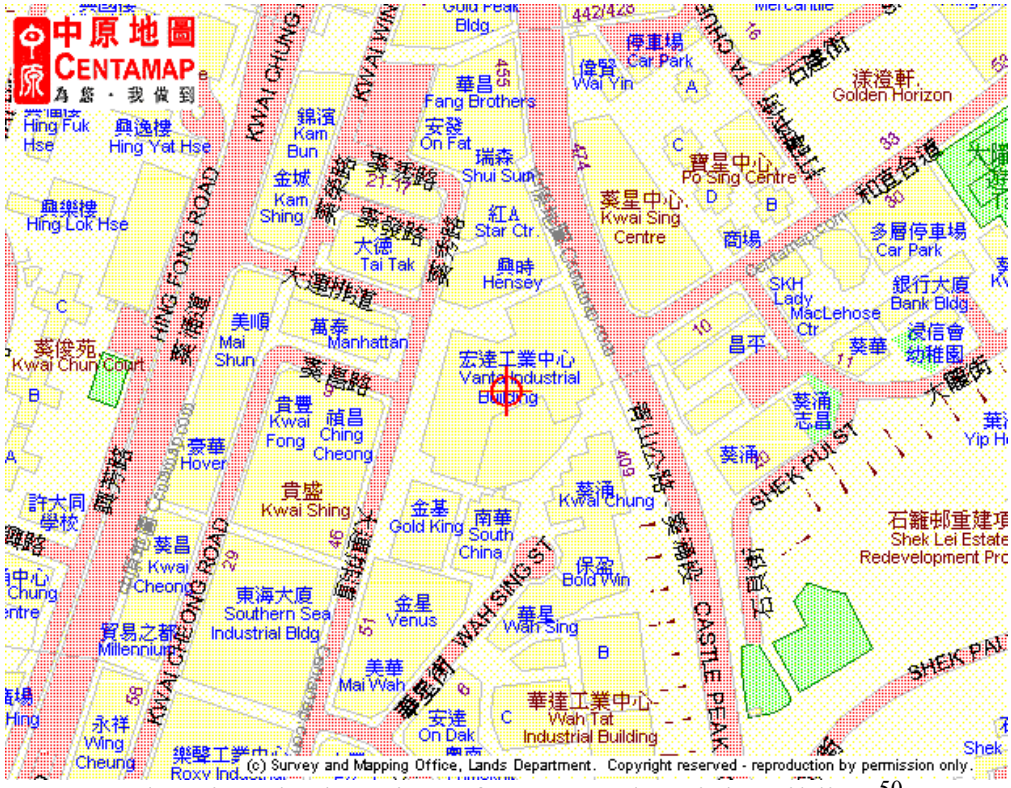

Fig. 7.6 Map showing the location of Vanta Industrial Building [50]

Vanta Industrial Building is located at a site between Tai Lin Pai Road and Castle Peak Road. Castle Peak Road is a highway and there is no vehicular access leading from the building to this road. Tai Lin Pai Road, on the other hand, provides the main access to the building. Supplementary traffic and loading and unloading are taken place in Wah Sing Street. There are no public transport facilities in the vicinity. The nearest MTR station is located at Kwai Fong Road while the nearest bus station is at Shek Pui Street. In order to reach the bus station, people need to go to Wah Sing Street and walk across a pedestrian bridge there. There is no direct pedestrian road

[50] Adpated from Centaline Property Agency Limited, http://www.centamap.com

linking Vanta and Castle Peak Road. Therefore, one should not be confused by the short distance indicated on the map. Reaching the area is the most convenient by taxi or private cars. The bridge linking Shek Pui Street and Wah Sing Street across Castle Peak Road provides an access for pedestrians from Castle Peak Road. No traffic light can be found in the area to direct traffic.

Fig. *7.7*

Fig. 7.8.

Fig.7.7 Pedestrian Bridge, Castle Peak Road *(Date taken by author: 21/01/2006)*
Fig. 7.8 Portion of Castle Peak Road outside Vanta Industrial Centre *(Date taken by author: 21/01/2006)*

Effort Industrial Building

Fig 7.9 Map showing the location of Effort Industrial Building [51]

Effort Industrial Building is a corner site adjoining Tai Lin Pai Road, Wah Sing Street and Kung Yip Street. It is quite convenient to reach Effort from the Kwai Fong MTR station. The bridge mentioned above in Vanta can be easily accessed and so the bus station in Shek Pui Street is not far away from Effort. There are traffic lights to direct traffic there. Car park and the loading and unloading areas are located on Kung Yip Street.

[51] Adpated from Centaline Property Agency Limited, http://www.centamap.com

Fig. 7.10 The road junction outside Effort Industrial Building *(Date taken by author: 21/01/2006)*

Riley House

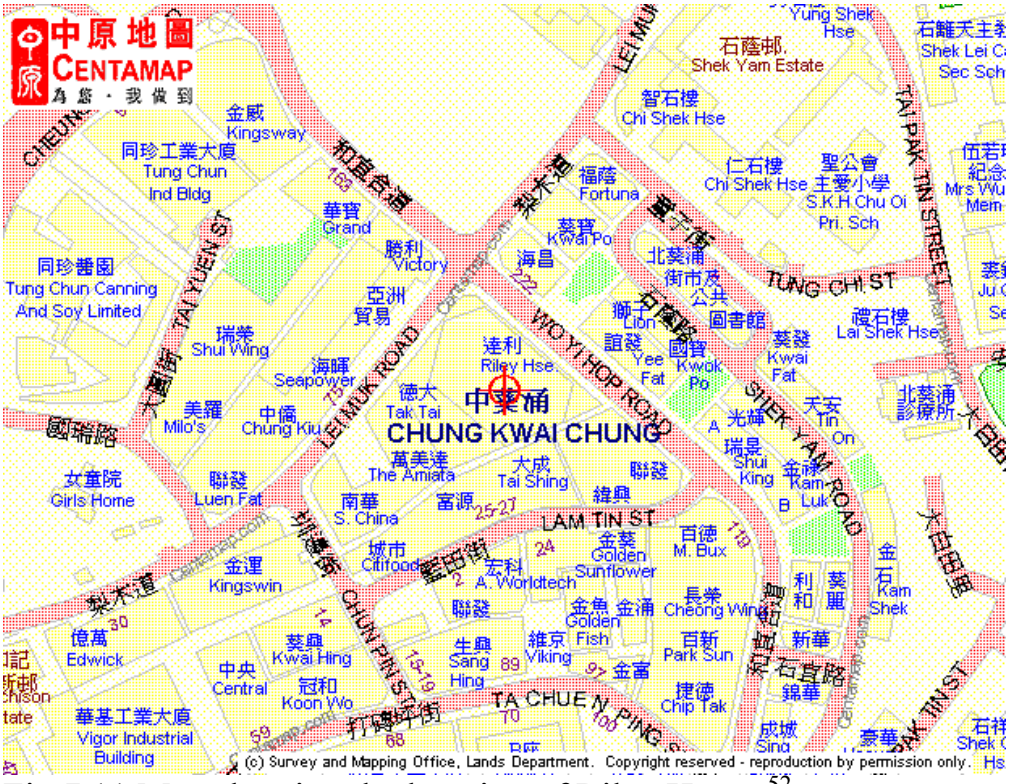

Fig.7.11 Map showing the location of Riley House [52]

[52] Adpated from Centaline Property Agency Limited, http://www.centamap.com

Riley House is also a corner site at the junction of Lei Muk Road and Wo Yi Hop Road. Many bus stations are located on both sides of Wo Yi Hop Road. Some even are located right in front of the entrance of Riley House. Public vans also load and unload on Wo Yi Hop Road. On Lei Muk Road, there is another bus station. Riley House is therefore easily accessible by public transport. Pedestrians can easily walk across the two sides of Wo Yip Hop Road with the help of traffic lights. Car parking and the loading and unloading areas are located at Lei Muk Road.

Fig. 7.12

Fig. 7.13

Fig. 7.12 Road junction outside Riley House *(Date taken by author: 21/01/2006)*
Fig. 7.13 Bus Bus and van stops outside Riley House on Wo Yi Hop Road *(Date taken by author: 21/01/2006)*

Fig. 7.14.

Fig. 7.15

Fig. 7.14 Bus stop on Lei Muk Road *(Date taken by author: 21/01/2006)*
Fig. 7.15. Bus and van stops outside the entrance of Riley House *(Date taken by author: 21/01/2006)*

From the above findings, it seems that the Board does not show particular preference for a site with high accessibility or convenient public transport when considering planning applications. However, this factor should be investigated together with other factors.

Applied Uses

"The entry of a use in Column 2 of a use implies that that use is compatible with the adjoining zones." [53] Lai (2003) argued that this is definitely correct but the Town Planning Board often ignores this point when making a decision about a planning application. In this case study, the uses in buildings under investigation all fall under column 2 of the outline zoning plan but some of the applications are rejected. In this study, we therefore, attempt to seek evidence to verify the above argument.

[53] L.W.C. Lai, Town Planning in Hong Kong: A review of planning appeal decisions, 1997-2001, (Hong Kong: Hong Kong University Press, 2003).

Vanta Industrial Centre

Fig.7.16 Vanta Industrial Centre *(Date taken by author: 21/01/2006)*

Looking at Vanta, it is surrounded by many similar industrial buildings. The shops there are mainly stores providing cleaning or maintenance services for vehicles and shops selling vehicle components or other related business. In the area, only one fast food restaurant was found.

Fig. 7.17

Fig. 7.18

Fig 7.19

Fig. 7.20

Fig. 7.17, 7.18 and 7.19 Shops on the ground floor of Vanta Industrial Centre *(Date taken by author: 21/01/2006)*

Fig. 7.20 Shops opposite to Vanta Industrial Centre *(Date taken by author: 21/01/2006)*

Going further down to Castle Peak Road, the buildings opposite to Vanta and its neighbour, Hensey Industrial Building, are mainly residential buildings built in 1970s. There are many homes for the elderly together with shops for the residents there. However, with the help of Castle Peak Road, where there is no direct collection of any road from the side of Vanta to Castle Peak Road, the industrial areas are isolated from the residential areas. The only linkage near Vanta is the above mentioned pedestrian bridge.

Fig. 7.21 *Fig. 7.22*

Fig 7.21 Homes for the elderly, Castle Peak Road *(Date taken by author: 21/01/2006)*
Fig. 7.22 Shops on Castle Peak Road *(Date taken by author: 21/01/2006)*

Since Vanta is close to residential areas, and clean industries which generate less or even no pollution, it is favourable for the living of residents in the adjoining area. Office and showroom uses in the building produce less pollution and do not cause substantial impact to the residents there. Therefore, office and showroom use, especially for vehicles and related products, in Vanta are considered to be compatible with the surrounding environment. As the planning applications in Vanta are either offices or showrooms, the compatibility of these uses to the environment plays a crucial role in getting planning approvals.

Effort Industrial Building

Fig. 7.23 Effort Industrial Building *(Date taken by author: 21/01/2006)*

Effort is also surrounded by similar industrial buildings as that around Vanta. However, the closeness of Effort to the Kwai Hing MTR station and the direct linkage of the road adjoining Effort make it a less isolated industrial building compared with Vanta. There are many traffic lights in front of the main entrance of the building directing pedestrians and vehicular traffic. The shops there in Effort are much more diversified than that in Vanta. On the ground floor of Effort, there is a bank at the road junction

facing three roads and is very noticeable to pedestrians. Next to the banks are a local provision store, a store selling metal components and a convenient store. Opposite to Effort and on the other side of Kung Yip Street is a bakery shop. Walking up further, at the junction of Kung Yip Street and Wah Sing Street is a restaurant. Right next to Effort on Tai Lin Pai Road, there are a playground and a wet market. Sun Kwai Hing Plaza is also within walking distance. Residential buildings and a school can also be found near Sun Kwai Hing Plaza. Another residential area is located up Kung Yip Road. There are relatively more pedestrians than those in the area around Vanta.

Fig.7.24

Fig. 7.25

Fig.7.26

Fig. 7.24 to 7.26 Ground floor shops of Effort Industrial Building (Date taken by author: 21/01/2006)

Fig. 7.27

Fig. 7.28

Fig 7.27 to 7.28 Shops opposite to Effort Industrial Building *(Date taken by author: 21/01/2006)*

The Board may see the area around Effort as a buffer region separating industrial area and residential use. In this view, clean industry and some commercial uses are allowed in this area. The successful applied uses in Effort are bank, local provision store, training centre and showroom. They are clean and seldom generate nuisance to the residents. Therefore, they are compatible with the surrounding environment and their applications are normally allowed.

Riley House

Fig. 7.29 Riley House (Date taken by author: 21/01/2006)

Riley is also a corner site facing two roads, namely Lei Muk Road and Wo Yi Hop Road. Different types of development are found in this area. Riley is itself a relatively new industrial building which was built in 1992. Opposite to it is a trade centre with curtain walling. Judging from the appearance, this trade centre is a newly established building in the area. Though the abovementioned two buildings are new, there are many older industrial buildings on the back of Riley which are facing Lam Tin Road. Except the trade centre, most industrial buildings in the area are older. Directly opposite to Riley is an old industrial building which is of seven storey height.

Fig. 7.30 *Fig. 7.31*

Fig. 7.30 and 7.31 The trade centre opposite Riley House (Asia Trade Centre) *(Asia Trade Centre) (Date taken by author: 21/01/2006)*

Fig. *7.32* The older industrial building opposite Riley House *(Date taken by author: 21/01/2006)*

Residential development is in close proximity to Riley which is just separated by Wo Yip Hop Road. Opposite to Riley and on the other side of Wo Yi Hop Road are residential development built at approximately 1970s. Further behind these private residential buildings are public housing estate (Shek Yam Housing Estate) with clinics, schools and a library.

Fig. 7.33

Fig. 7.34

Fig. 7.33 Private residential building near Riley House *(Date taken by author: 21/01/2006)*
Fig. 7.34 Public housing Estate near Riley House *(Date taken by author: 21/01/2006)*

There are four shops on the ground floor of Riley. They are shops selling measurement instruments, metallic components, a restaurant and a stationery shop. Three adjoining shops are now vacant for leasing in Riley (as at 21/01/2006). On the opposite side of Wo Yi Hop road, there are various kinds of retail shops including fast food shops, stationery shops, property agent office, restaurants, to mention but a few. The shops serve the dwellings of the local people. Walking up Lei Muk Road to Tung Chi Street, there is a Shek Yam Shopping centre of about seven-storey height which has a curtain walling.

Fig. 7. 35

Fig. 7.36

Fig.7.37

Fig. 7.38

Fig.7.35 to 7.38 Ground floor shops of Riley House *(Date taken by author: 21/01/2006)*

Fig.7.39

Fig.7.40

Fig. 7.39 Shek Yam Shopping Centre *(Date taken by author: 21/01/2006)*
Fig. 7.40 Shops opposite Riley House *(Date taken by author: 21/01/2006)*

From the above analysis, we proposed that the Board aims to change the landscape of the area concerned from industrial to mixed industrial and commercial with residential development. Therefore, the industrial area should be clean and generate minimum nuisance to the public and to the environment.

The applied uses in Riley are (a) bank, supermarket and fast food shop, which are proposed to locate on the first floor and (b) showroom, which is proposed to locate on the upper ground floor. These uses are considered to be compatible with the adjoining environment. However, the application was rejected. This can be explained by the fact that the time for applications was around 1992 and 1993. At that time, the Board had not changed the planning intention for the area concerned. In addition, the Board did not want to allow a major change in the use of a newly established building, which would violate the original planning intention. The first floor of Riley is now used as an office.

Other factors

In addition to the above factors that the Town Planning Board may take into account when considering planning applications, other factors may also be material in the determination of the Board. Labour force of the region

may be a crucial factor. In the Explanatory Statement of the OZP in Kwai Chung (S/KC/ 21), it states that "Provision of industrial land in the Area has been made in conjunction with the industrial land planned for Tsuen Wan and Tsing Yi to ensure that sufficient industrial land is reserved to provide employment opportunities for the labour force of Tsuen Wan New Town as a whole."[54] Therefore, the Board may consider whether the applied use can provide employment opportunities for the labour force in the region concerned.

Fire safety is also a crucial factor in determining planning intention. As the TPO concerns about the health, safety and general welfare of the public, the Board may dislike uses which may pose threats to the public. Moreover, industrial buildings are places exposing to additional fire risks, the Board may pay extra attention to the fire safety when planning applications is applied in this area. This can be evident from the guidelines published by the Board which states that "The Fire Services Department (FSD) should be satisfied on the risks likely to arise or increase from the proposed commercial use under application. For shop and services proposed on ground floor, it should generally be small in scale, and the means of escape (such as direct discharge to street) and other fire safety installations

[54] Explanatory statements of OZP S/KC/21 para 7.7.2.

should meet FSD's requirement."[55] Although the above condition applies particularly to commercial use in an industrial building, it is evident that the Board would take fire safety into account when determining the approvals for other planning applications.

The Board may also consider the maintenance and repair of the building under application in making their decision. Good management of industrial building ensures that the building is up to standard without unauthorized building works which can reduce the risks for accidents to happen. Therefore, threats to the public are minimized. Not only the chance for accidents is minimized, good management can increase the value of the buildings and their appearance as well. The improved appearance can improve the general amenity and environment of the area and may enhance the chance of obtaining planning approval. The setting up of an Owners' Corporation and a management plan may be a crucial area of concern for the Board to make a decision on planning application.

Other factors like trustworthiness of the applicant, lease conditions, enforcement records, land resumption arrangement, planning gain, ecological management plan of the land concerned may play a role in the

[55] TPB PG-NO 25B *para*. 6.2 (e)

decision making process of the Town Planning Board when granting planning permission.

Conclusion

The above case study revealed some factors which the Town Planning Board would take into account when determining the planning applications. It is proposed that the Board would take into account all the factors mentioned above in its decision and that no particular factor prevails over another factor, with the exception of the compliance with the statutory requirements.

We hope that this case study can provide another letter for the factors which may be considered by the Town Planning Board when making a decision on planning application.

CHAPTER 8

CONCLUSION

Limitations of our study

Though the probit or logit model is a robust statistical method, the results obtained in this dissertation is subject to some limitations. The first area of concern is the unavailability of data. There is a lot of missing data for site area and proposed GFA when data were collected from the Planning Department. We believe that the result would be more accurate if the missing information is minimized.

The second limitation is the representiveness of the data sets. Some data, like the number for planning application in the rural areas, hardware shop, residential and offensive industrial use and the number for planning appeals, are of very small size. The small number may not be representative and may render the result inaccurate. Particularly, due to the short time after the announcement of the revised guidelines, the number of application after 2001 is small compared with the data before 2001. Also, the market may need time to assimilate the effect. All these may lower the accuracy of the result.

The third limitation is the appropriateness of the proposed GFA and AF01 as proxies for development scale and effect of the revised policies. The proxies may not be good enough to represent the above two areas of concern. In addition, VACANCY may not be a good variable to act as a proxy for market situation in industrial area.

The fourth limitation is that other qualitative factors are not included in the test. The qualitative factors include traffic conditions, compatibility of the applied use with adjoining environment, public interest, state of the building concerned, to mention but a few, have not been taken into account in the test, Moreover, these qualitative factors can hardly be given an index to include them into the probit or logit model.

Future Study

There are plenty of areas for further study. In this dissertation, only the data from the Industrial Zones is used in determining the behaviour of the Town Planning Board. However, data from other zones can be collected and interpreted to derive a general picture of the decision of the TPB. By studying the data from different zones, the result can be compared and distinction can be made in any difference arises.

Market situation is an area worth investigating. However, the time dummy (AF01) is just an indirect proxy because the change in economic situation initiated the revision of the guidelines. The vacancy variable (VACANCY) in our model may not be good proxies as well. Therefore, more representative variables can be compiled to investigate the effect from the economy. An index for GDP change in industrial output can be derived to give a direct relationship. Other factors like the nature of developers, the type of lease, the previous record for planning enforcement, etc can be investigated to see if they constitute any effect for obtaining planning approvals.

Furthermore, we only investigate the sign of the coefficient without looking into its magnitude. Further study can be carried out in this regard so that a more comprehensive picture can be obtained.

Lastly, only three case studies are conducted to find out the possible material considerations. It would be more comprehensive and persuading if more case studies can be done to make a better conclusion.

Epilogue

Our attempt in this dissertation is to find out the decision criteria of the Town Planning Board in granting planning permissions. In this study, a total of 1991 sets of data from Industrial Zones were collected in the period between 1975 and June 2005. Six refutable hypotheses were established to investigate the possible criteria for obtaining planning approval. The possible criteria were the GFA, location, use applied for, policy, stage of application and market situation of industrial use.

The results of the analysis show that D_OFF, D_RES, D_IO, D_LPS, S16 and ln(GFA) are found to be statistically significant and positive while D_REST is negative and significant. The success rate of D_OFFENSIVE and D_HWSHOP are 100%.

We found that site with large GFA are less likely to obtain planning permissions from the Town Planning Board. This indicates that there is no evidence to prove the existence of rent-seeking behaviour of the Board.

The Town Planning Board does not show particular preference for granting planning approvals in certain region. In our analysis, the coefficient

for HK and NT are insignificant, meaning that no preference exists for a particular type of zone.

In our study, we show that Town Planning Board tends to give planning permissions for offensive industrial uses and hardware shops in the Industrial Zones. The probability to obtain planning approval for office, residential, industrial/office building and local provision store are higher than commercial and restaurant use. Thus, the Board does give preference towards certain uses.

The probability of obtaining planning approvals in s.16 planning applications is higher than that for planning reviews or planning approvals. This shows that the Board does consider the stage of application in granting planning permission.

It is surprising to note that the probability of obtaining planning approvals after 2001 is no different from that before 2001. This shows that the Board does not follow its guidelines in relaxing the control in the Industrial zone.

The result also shows that the Town Planning Board would take into account the market situation when considering the grant of planning permission.

In this dissertation, only a limited number of planning concerns are investigated. In addition, there are a lot of issues for further study. Therefore, the result in this dissertation is not final and conclusive. Following the footsteps of Professor Lawrence, W. C. Lai, Dr. B.S. Tang and my seniors in the Department of Real Estate and Construction of my University, notably Dr. Yung Ping and Miss Veronica Lin, I hope that this dissertation can provide factual evidence for further investigation in the area of development control.

Appendix I

TPB PG-NO. 25B

TOWN PLANNING BOARD GUIDELINES FOR USE/DEVELOPMENT WITHIN "INDUSTRIAL" ZONE

(Important Note:-

The Guidelines are intended for general reference only.

Any enquiry on this pamphlet should be directed to the Planning Information and Technical Administration Unit of the Planning Department, 17th Floor, North Point Government Offices, 333 Java Road, Hong Kong - Tel. No. 2231 5000.

These Guidelines are subject to revision without prior notice.)

1. Introduction

1.1 The Town Planning Board (the Board) recognizes that with the structural changes in the industrial sector, industrial activities in Hong Kong are shifting from manufacturing and production-oriented to more diverse management/service-oriented and information-based. In recent years, there is particularly rapid development of information technology (IT) and telecommunications industries. The "Other Specified Uses (Business)" zone has been introduced by the Board to allow maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings, as well as in the development of new buildings for both commercial and clean industrial uses. To further facilitate development of IT and telecommunications industries, the Board sees the need to expand the scope of uses to be permitted in the "Industrial" ("I") zone to accommodate such industries. Although the planning intention of the "I" zone is to reserve land primarily for general industrial uses to ensure an adequate supply of industrial floor space, IT and telecommunications industries are considered compatible with industrial uses. Owing to their special requirements, such as uninterrupted power supply, heavy floor loading and high ceiling, there is a need for such industries to be located in industrial or I-O buildings in the "I" zone.

1.2 With the migration of manufacturing industries to the Mainland, there is also a need to cater for supporting industrial-related non-manufacturing activities which have an important role to play in Hong Kong's economy. To this end, the Board sees the need to relax the control on offices related to industrial uses and trading firms which require large storage space and frequent loading/unloading. These uses are already permitted in I-O buildings, and will now be permitted as of right in the "I" zone. However, general commercial and office uses will still be subject to planning control in the "I" zone.

2. Scope and Application

2.1 This set of Guidelines is intended to set out the revised definitions of some of the industrial and industrial-related use terms listed in the User Schedule of the "I" zone and explain in detail the uses that are permitted as of right within the "I" zone. It also sets out the main planning criteria for assessing planning applications for office buildings and commercial uses in industrial or I-O buildings within the "I" zone.

2.2 This set of Guidelines shall replace :

TPB PG-No. 1A - Application for Office and Showroom Uses in Industrial Building within Industrial Zone under Section 16 of the Town Planning Ordinance

TPB PG-No. 3A - Application for Office Buildings in Industrial Zone under Section 16 of the Town Planning Ordinance

TPB PG-No. 7A - Application for Commercial Use in Industrial Building within Industrial Zone under Section 16 of the Town Planning Ordinance

2.3 With the amendments to the User Schedule of the "I" zone, I-O buildings[1] will be permitted as of right. Hence, the following set of Guidelines is no longer relevant and shall be deleted :

3. Definition of Terms

Industrial Use

3.1 Industrial Use means the use of any place, premises or structure for the manufacture, alteration, cleansing, repairing, ornamenting, finishing, adaptation for sale, breaking up, or demolishing or transformation of goods and materials; for the storage, loading, unloading or handling of goods and cargo; or for the training, research, design and development, quality control and packaging in relation to the above processes.

3.2 Heavy and obnoxious industries, which have special locational requirements and different traffic and environmental impacts from general industrial uses, should be directed to specially designated sites. The industrial uses permitted in the "I" zone therefore exclude uses of such nature which are large-scale and/or require free-standing purpose-designed premises, such as aircraft maintenance and repair plant, chemical and biochemical plant, cement manufacturing plant, electric power station, gas works, material recovery/recycling facility, mining and quarrying, oil depot, oil refinery and petrol-chemical plant, refuse disposal installation, resource recovery park and sand depot. These uses should be accommodated in special industrial areas or "Other Specified Uses" zones specifically designated for such uses.

Office Related to Industrial use

3.3 Office Related to Industrial Use means any premises where the activities of a firm are in direct support of and complementary to an associated industrial operation, which may or may not be located in the same premises or building, or in the same general industrial area.

IT and Telecommunications Industries

3.4 IT and Telecommunications Industries generally refers to establishments involved in the manufacture, design, development, production, operation, processing or assembly of, or research into, any of the following :

a. electronic and micro-electronic systems, goods and components;

b. IT products and services including any computer hardware and software, contents and applications; and

c. telecommunications facilities and telecommunications services, "telecommunications" and "telecommunications services" having the same definitions as defined in the Telecommunications Ordinance (Cap. 106).

3.5 For the avoidance of doubt, activities involving direct provision of customer services, retail services or goods related to IT and telecommunications uses are excluded. General commercial/office uses are also excluded notwithstanding that these uses may adopt, in their process of working or operation, equipment or facilities that fall within those set out in paragraph 3.4.

Research, Design and Development Centre

3.6 Research, Design and Development Centre means any premises used for research and design of new or substantially modified products or industrial processes, and research and development of IT and telecommunications.

4. Permitted Uses/Developments in the "I" Zone

4.1 In general terms, in addition to general industrial uses, IT and telecommunications industries, office related to industrial use, research, design and development centre are

permitted as of right in the "I" zone. However, because of fire safety consideration, only activities that do not attract a large number of visiting members of the public to the premises due to the direct provision of customer services or goods will be permitted.

4.2 IT and telecommunications facilities and equipment, such as gateways, exchanges, switching centres, radio base stations, paging centres, data centres, data processing/computer centres, telesites or carrier hotels are considered suitable to operate in industrial and I-O buildings. Hence, these uses are permitted as of right within the "I" zone. However, any activities involving direct provision of customer services or goods related to IT and telecommunications uses are excluded.

4.3 Office related to industrial use is always permitted in both industrial and I-O buildings. There is no requirement for the related industrial operation to be located within the same premises or building, or in the same industrial area. Trading firm requiring frequent loading/unloading and large storage space of not less than 30% of the total usable floor area (UFA) of the firm within the same premises or building, which cannot normally be accommodated in conventional commercial/office buildings, will also be permitted.

4.4 Other commercial uses (such as eating place, office, and shop and services) as specified in the Notes will be permitted in the purpose-designed non-industrial portion on the lower floors of an existing building, provided that such uses are separated from the industrial uses located above by a buffer floor of non-hazardous occupancy, such as a parking or loading/unloading floor. For fire safety reason, no industrial uses will be permitted to co-exist with the commercial uses in the non-industrial portion.

4.5 Ancillary showroom use of up to 20% of the total UFA of an industrial firm in the same premises or building will be permitted without application. Motor-vehicle showroom use is also permitted as of right on the ground floor of an industrial building.

4.6 In accordance with the covering Notes to outline zoning plans, all uses ancillary and directly related to a permitted use, other than ancillary showroom use exceeding the 20% UFA threshold, are always permitted and no separate planning permission will be required.

5. Requirement for Planning Permission

5.1 Pure office building and commercial uses in an industrial building or on the upper floors of an I-O building, other than those specified in Column 1 of the Notes, will require planning permission from the Board under section 16 of the Town Planning Ordinance. Each application will be considered on its individual merits. These include general office use such as consultant firms and various types of agencies, and showroom use unrelated to any industrial operation in the same premises/building or exceeding the 20% UFA threshold.

6. Main Planning Criteria

6.1 The following main planning criteria are relevant in the consideration of proposed development of office building:

a. Any proposal for the development of office building should demonstrate that there is a shortfall in the provision of office and other commercial floor space to serve the industrial activities in the area, and there are no suitable alternative sites to accommodate the proposed office building in the vicinity.

b. The location of the proposed office building should be easily accessible to public transport facilities, in particular railway stations, to minimize the potential traffic generation.

c. Favourable consideration may be given to proposed office development on sites within the part of an industrial area requiring renewal or restructuring, and the proposed development will induce significant improvement to the general

amenity and environment of the area, or will alleviate existing interface problems by providing an environmental buffer between existing industrial and residential or other environmentally sensitive uses, such as school and community facilities.

d. There should be an adequate provision of parking and loading/unloading facilities within the site in accordance with the Hong Kong Planning Standards and Guidelines and to the satisfaction of the Transport Department.

6.2 For a proposed commercial use in an industrial building or on the upper floors of an I-O building, the following main planning criteria are relevant:

a. It should be demonstrated that there is a genuine need for the proposed use under application and no suitable alternative accommodation can be found in the vicinity. The location and scale of the proposed use should be justified on operational grounds.

b. Depending on the circumstances of individual cases and the availability of I-O or 'business' buildings in the vicinity at the time of application, the Board may grant temporary permission for showroom use exceeding 20% of the total UFA of an industrial firm in industrial buildings.

c. Provided that other criteria could be met and with good justifications, favourable consideration would be given to applications for showrooms requiring large floor area for the display of bulky goods and provision of adequate on-site loading/ unloading facilities, which could not normally be accommodated in conventional commercial/office buildings.

d. There should be an adequate provision of parking and loading/unloading facilities within the site in accordance with the Hong Kong Planning Standards and Guidelines and to the satisfaction of the Transport Department. The inclusion and operation of the proposed commercial use should not adversely affect the traffic conditions in the local road network.

e. The Fire Services Department (FSD) should be satisfied on the risks likely to arise or increase from the proposed commercial use under application. For shop and services use proposed on ground floor, it should generally be small in scale, and the means of escape (such as direct discharge to street) and other fire safety installations should meet FSD's requirements.

7. Modification/Change of Use in Existing Industrial or I-O Buildings

7.1 Where there is a modification/change of use, say, from one type of industrial use to another, or from industrial to non-industrial, the proposed use must be permitted in terms of the extant statutory plan. Where partial conversion of an industrial or I-O building to any use requiring planning permission is proposed, it must be demonstrated that the proposed use would be acceptable in terms of fire safety, land use, traffic and environmental considerations.

7.2 There is no provision for planning application for partial conversion of an industrial building for place of entertainment, educational institution, religious institution or shop and services use, other than those proposed on ground floor, due to fire safety and other planning considerations. Conversion of an industrial building in whole for these and other compatible uses may be permitted on application to the Board based on individual merits.

8. Other Statutory and Non-statutory Requirements

8.1 For all new development, redevelopment, conversion and modification/change of use, all other statutory and non-statutory requirements of relevant Government departments

must also be met. These include the building structure, means of escape and fire safety requirements, which will be considered at the building plan submission stage.

[1] *An I-O Building is defined as a dual-purpose building in which every unit of the building, other than that in the purpose-designed non-industrial portion, can be used flexibly for both industrial and office purposes. In terms of building construction, the building must comply with all relevant building and fire regulations applicable to both industrial and office buildings, including floor loading, compartmentation, lighting, ventilation, provision of means of escape and sanitary fitments.*

TOWN PLANNING BOARD
SEPTEMBER 2003

Appendix II

TPB PG-NO. 22B

TOWN PLANNING BOARD GUIDELINES FOR DEVELOPMENT WITHIN "OTHER SPECIFIED USES (BUSINESS)" ZONE

(Important Note:-

The Guidelines are intended for general reference only.

Any enquiry on this pamphlet should be directed to the Planning Information and Technical Administration Unit of the Planning Department, 17th Floor, North Point Government Offices, 333 Java Road, Hong Kong - Tel. No. 2231 5000.

These Guidelines are subject to revision without prior notice.)

1. Introduction

1.1 The "Other Specified Uses" annotated "Business" ("OU(Business)") zone has been introduced to allow maximum flexibility in the use of existing industrial and industrial-office (I-O) buildings as well as in the development of new buildings for both commercial and clean industrial uses. It is perceived as a combination of the "Commercial" and "Industrial" zones. However, it is not intended to replace either of them as both zones will still have an important role to play in ensuring an adequate supply of land for core commercial and industrial activities at appropriate locations.

1.2 The planning intention of the "OU(Business)" zone is primarily for general employment uses. Under the "OU(Business)" zoning, a mix of non-polluting industrial, office and other commercial uses will be permitted as of right in new developments of 'business' buildings. Industrial uses involving offensive trades declared under the Public Health and Municipal Services Ordinance will not be permitted within the "OU(Business)" zone. In order to ensure that the concerns on fire safety and environmental impacts are properly addressed, only less fire hazard-prone office use that would not involve direct provision of customer services or goods to the general public will be permitted as of right in existing industrial and I-O buildings within an "OU(Business)" zone. As it is not possible to phase out existing polluting and hazardous industrial uses all at once, it is necessary to ensure compatibility of the uses within the same building and in existing industrial areas until the whole area is transformed to cater for the new non-polluting business uses.

2. Scope and Application

2.1 This set of Guidelines sets out the definitions of relevant terms used in the user schedule of the "OU(Business)" zone and explains in detail the uses that are permitted within the zone.

3. Definition of Terms

Non-polluting Industrial Use

3.1 Non-polluting Industrial Use means any industrial use which does not involve activities that are detriment to the occupants of the building and amenity of the area by reason of noise, waste water discharge, vibration, smell, fume, smoke, soot, ash, dust or grit.

3.2 In determining whether an industrial use falls within the meaning of 'non-polluting industrial use', reference should be made to the relevant ordinances such as the Air Pollution Control Ordinance, Water Pollution Control Ordinance, Waste Disposal Ordinance and Noise Control Ordinance, and their relevant technical memoranda and regulations as well as the relevant Government published guidelines such as the Hong Kong Planning Standards and Guidelines. Advice could also be sought from the relevant authorities such as the Director of Environmental Protection on a

case-by-case basis.

3.3 In general, it includes uses involving prototyping, production, design, research and development, alteration, testing, quality control, adaptation, repair, assembly, packaging, storage and distribution of goods and materials without generating environmental pollution and nuisance to neighbours. It also includes information technology support and training for the enhanced productivity and delivery of the goods and materials involved in the aforementioned processes. Examples include custom-tailoring, fashion design and production, computer-aided design service, design and prototyping of electronic product and component, label/badge/button embossing, editing of newspapers, books and magazines for printing off the premises, photo-typesetting and typesetting, film developing and editing, packaging and quality inspection of finished products and after-sale repair of electrical appliances, furniture and office equipment.

3.4 It excludes industrial uses involving offensive trades declared under the Public Health and Municipal Services Ordinance and Specified Processes covered by the Air Pollution Control Ordinance; activities which produce chemical waste; or other activities which generate residuals such as waste water, noise, aerial emissions, solid waste, runoff and odour, or create physical changes causing unacceptable impacts on other land uses or on the environment.

3.5 Non-polluting Industrial Use (excluding industrial undertakings involving the use/storage of Dangerous Goods) refers to those industrial establishments falling within the definition set out in paragraph 3.1 above, and would not involve the use and/or storage of substances classified as Dangerous Goods which requires a licence under the Dangerous Goods Ordinance. Non-polluting industrial establishments which would involve the use and/or storage of small quantities of Dangerous Goods that are exempted from the licensing requirements will be permitted.

Office (excluding those involving direct provision of customer services or goods)

3.6 Office (excluding those involving direct provision of customer services or goods) means any office of such uses that would not attract frequently a large number of visitors to the premises by providing direct services or goods to customers or visiting members of the general public.

3.7 In general, the premises are to be used for 'office' function which would not attract a large number of visitors. Some examples include headquarters or back-office operations; professional consultants such as architects, engineers, surveyors, planning consultants, solicitors, accountants; and business services such as advertising agencies, management consultants, public relations agencies and interior/graphic design offices.

3.8 Establishments which may be frequently visited by the general public, such as travel agents, property agents, employment agencies, investment broker firms, money lending offices, ticketing and sales offices and tourist information offices would be considered as general office, and planning permission is required from the Board in industrial and I-O buildings (except in the purpose-designed non-industrial portion on the lower floors of an existing building).

I-O Building

3.9 An I-O Building is defined as a dual-purpose building in which every unit of the building, other than that in the purpose-designed non-industrial portion, can be used flexibly for both industrial and office purposes. In terms of building construction, the building must comply with all relevant building and fire regulations applicable to both industrial and office buildings, including floor loading, compartmentation, lighting, ventilation, provision of means of escape and sanitary fitments.

4. Permitted Use/Development in an "OU(Business)" Zone

New Development

4.1 The following types of buildings are permitted as of right in the "OU(Business)" zone as new development or redevelopment/conversion of the whole building:

a. Business buildings providing accommodation for a mix of non-polluting industrial (excluding industrial undertakings involving the use/storage of Dangerous Goods), office and other commercial uses;

b. Office buildings with or without retail and other commercial uses;

c. Industrial buildings providing accommodation for non-polluting industrial uses (excluding industrial undertakings involving the use/storage of Dangerous Goods) and office uses (excluding those involving direct provision of customer services and goods); and

d. I-O buildings providing accommodation for non-polluting industrial uses (excluding industrial undertakings involving the use/storage of Dangerous Goods), offices (excluding those involving direct provision of customer services and goods) on upper floors, and general offices with or without commercial uses in the purpose-designed non-industrial portion on the lower floors which will be separated from the industrial uses on the upper floors by a buffer floor.

4.2 All uses included in Column 1 of Schedule I of the user schedule for the "OU (Business)" zone will be permitted as of right in new development as well as redevelopment/conversion of an existing industrial or I-O building in whole to a 'business' building.

4.3 New development of industrial or I-O buildings, i.e. development with general building plans submitted and approved under the "OU(Business)" zoning, have to conform to uses specified under Column 1 of Schedule II of the user schedule unless otherwise permitted by the Town Planning Board through the planning permission system. For such developments, if no industrial undertakings involving offensive trades or the use/storage of Dangerous Goods will be accommodated within the building and such intention is clearly specified in the building plan submission, general office use will be permitted as of right. Otherwise, only those office uses that would not involve direct provision of customer services or goods to the general public will be permitted. This is to address the concern on fire safety within the building. By the same token, for a building with office uses involving direct provision of customer services or goods, planning permission will not be granted for any proposed industrial undertakings involving the use/storage of Dangerous Goods that requires a licence under the Dangerous Goods Ordinance.

Existing Industrial or I-O Buildings

4.4 As specified in the covering Notes of the outline zoning plans, no action is required to make the existing use of any land or building conform to the relevant plan, including the "OU(Business)" zoning. All existing uses within an existing industrial or I-O building will be tolerated. However, any material change of use will have to be permitted in terms of the plan (see paragraph 4. 7 below).

4.5 Whilst it is the intention to provide greater flexibility in the use of the existing industrial or I-O buildings before such buildings are redeveloped, it is necessary to ensure that the fire safety and environmental concerns are properly addressed. In view of the possible presence of existing polluting and hazardous industrial uses, it is necessary to ensure compatibility of the uses within the same building until the whole building is modified/converted to accommodate the new non-polluting and less fire hazard-prone uses. In such circumstances, Schedule II of the user schedule for the "OU(Business)" zone provides that only office use which would not involve direct provision of customer services or goods to the general public will be permitted as of right in existing industrial or I-O buildings. Other office, commercial and institutional uses specified under Column 2 of Schedule II will require planning permission from the Town Planning Board. The provision for planning application for certain uses including shop and services, educational institution, place of entertainment and religious institution is restricted to those

located at the ground floor only due to fire safety concerns. However, ancillary showroom use of up to 20% of the total usable floor area of an industrial firm in the same premises or building will be permitted without application. Ancillary showroom exceeding the 20% threshold may also be permitted on any floor of the building upon application to the Board.

4.6 For an existing I-O building, commercial uses and general office use will also be permitted as of right in the purpose-designed non-industrial portion on the lower floors of an existing building (excluding basement(s) and floors containing wholly or mainly car parking, loading/unloading bays and/or plant room) provided such uses are separated from the industrial or I-O use located above by a buffer floor of non-hazardous occupancy, such as a parking or loading/unloading floor. No industrial uses will be permitted to co-exist with the commercial uses in the non-industrial portion.

Material Change of Use in Part of Existing Industrial or I-O Buildings

4.7 When there is a material change of use, say, from one type of industrial use to another, or from non-industrial to industrial, the proposed use must be permitted in terms of the extant OZP. In this respect, only non-polluting industrial uses without the use/storage of Dangerous Goods that requires a licence under the Dangerous Goods Ordinance will be permitted as of right in order to avoid the perpetuation and/or aggravation of the potential interface problems.

5. Other Statutory and Non-statutory Requirements

5.1 For all new development, redevelopment, conversion and material change of use, adequate parking and loading/unloading spaces should be provided in accordance with the requirements of the Hong Kong Planning Standards and Guidelines, and all other statutory or non-statutory requirements of relevant Government departments must also be met. These would include building structure, means of escape and fire safety requirements, which would be considered at the building plan submission stage.

Town Planning Board
MAY 2004

Lands Administration Office
Lands Department

Practice Note

Issue No. 2/2001

"Other Specified Uses (Business)" Zones

The Town Planning Board on 19 January 2001 announced the introduction of a set of guidelines for application to developments within the newly designated "OU(Business)" zones on outline zoning plans.

2. All existing holders of Government leases within these new zones should note that whilst the statutory framework on planning for these areas has now been relaxed, the current land administration policy applicable, territory-wide, to lease modifications etc. has not been altered and all current related practices are still applicable.

3. As soon as the statutory procedures to effect the necessary amendments to the concerned outline zoning plans have been completed, holders of existing government leases (held for 'industrial' purposes) who wish to take advantage of the new planning parameters, should submit their applications to the respective District Lands offices concerned, for lease modification or waiver, as appropriate, in the usual manner. In line with our current policy, any approval given will be subject to the payment of a modification premium or waiver fee, depending on the nature of the permission being given.

4. In the case of lease modifications to give effect to the above zoning changes (and when new government sites within these new zones are to be offered for sale), our intention is that a new user clause for 'non-residential' purposes (excluding certain other specific categories of uses, as appropriate) will be adopted.

(R.D. Pope)
Director of Lands
23 February 2001

Appendix IV Correlation Table for all independent variable

	D_COM	D_OFF	D_RES	D_IO	D_OFFENSIVE	D_LPS	D_HWSHOP	D_REST	HK	KLN	NT	AF01	S16	SA	GFA	VACANCY
D_COM	1	0.212	0.215	**-0.438**	-0.128	-0.095	-0.049	-0.013	0.1611	-0.018	-0.1	0.018	-0.165	0.013	-0.004	-0.044
D_OFF	0.212	1	-0.029	**-0.429**	-0.097	-0.095	-0.068	-0.057	0.1263	0.107	-0.21	0.102	-0.129	-0.058	0.033	0.071
D_RES	0.215	-0.029	1	-0.14	-0.032	-0.031	-0.022	-0.045	0.3555	-0.124	-0.14	-0.045	-0.053	0.183	0.213	0.061
D_IO	**-0.438**	**-0.429**	-0.14	1	-0.107	-0.058	-0.075	-0.097	-0.153	0.18	-0.07	-0.13	0.188	-0.062	0.152	0.126
D_OFFENSIVE	-0.128	-0.097	-0.032	-0.107	1	-0.024	-0.017	-0.034	-0.047	-0.106	0.151	-0.034	0.032	-0.032	-0.067	0.111
D_LPS	-0.095	-0.095	-0.031	-0.058	-0.024	1	-0.017	-0.033	-0.045	-0.101	0.144	0.001	0.053	-0.006	-0.029	-0.021
D_HWSHOP	-0.049	-0.068	-0.022	-0.075	-0.017	-0.017	1	-0.024	-0.047	-0.054	0.095	-0.024	0.038	0.011	-0.057	-0.099
D_REST	-0.013	-0.057	-0.045	-0.097	-0.034	-0.033	-0.024	1	-0.065	-0.004	0.057	0.122	-0.005	-0.025	-0.075	-0.002
HK	0.161	0.126	0.356	-0.153	-0.047	-0.045	-0.047	-0.065	1	**-0.445**	-0.29	-0.065	-0.033	-0.008	0.057	-0.011
KLN	-0.018	0.107	-0.124	0.1801	-0.106	-0.101	-0.054	-0.004	**-0.445**	1	**-0.72**	-0.045	-0.058	-0.061	0.02	-0.012
NT	-0.098	-0.207	-0.14	-0.068	0.151	0.144	0.0954	0.057	-0.293	**-0.717**	1	0.068	0.092	0.073	-0.061	0.007
AF01	0.018	0.102	-0.045	-0.13	-0.034	0.001	-0.024	0.122	-0.065	-0.045	0.068	1	0.027	-0.031	-0.007	0.381
S16	-0.165	-0.129	-0.053	0.1885	0.032	0.053	0.0382	-0.005	-0.033	-0.058	0.092	0.027	1	-0.146	-0.135	0.012
SA	0.013	-0.058	0.183	-0.062	-0.032	-0.006	0.0106	-0.025	-0.008	-0.061	0.073	-0.031	-0.146	1	**0.565**	-0.041
GFA	-0.004	0.033	0.213	0.1516	-0.067	-0.029	-0.057	-0.075	0.0572	0.02	-0.06	-0.007	-0.135	**0.565**	1	0.139
VACANCY	-0.044	0.071	0.061	0.1256	0.111	-0.021	-0.099	-0.002	-0.011	-0.012	0.007	0.381	0.012	-0.041	0.139	1

*Figure larger than 0.4 or smaller than -0.4 are highlighted with bold italic style.

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